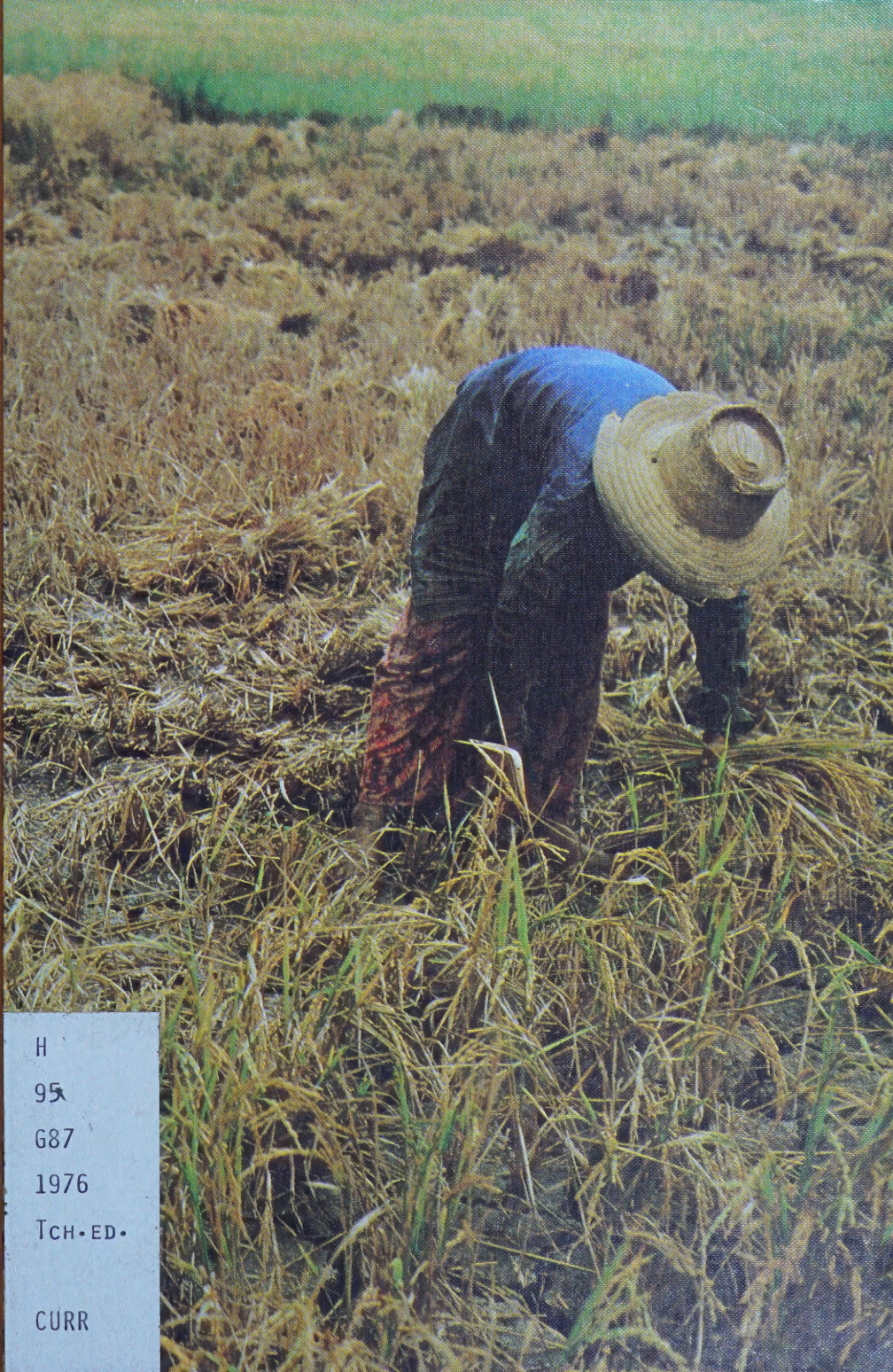


People, Places, Products Teacher's Edition



H

95

G87

1976

TCH • ED •

CURR

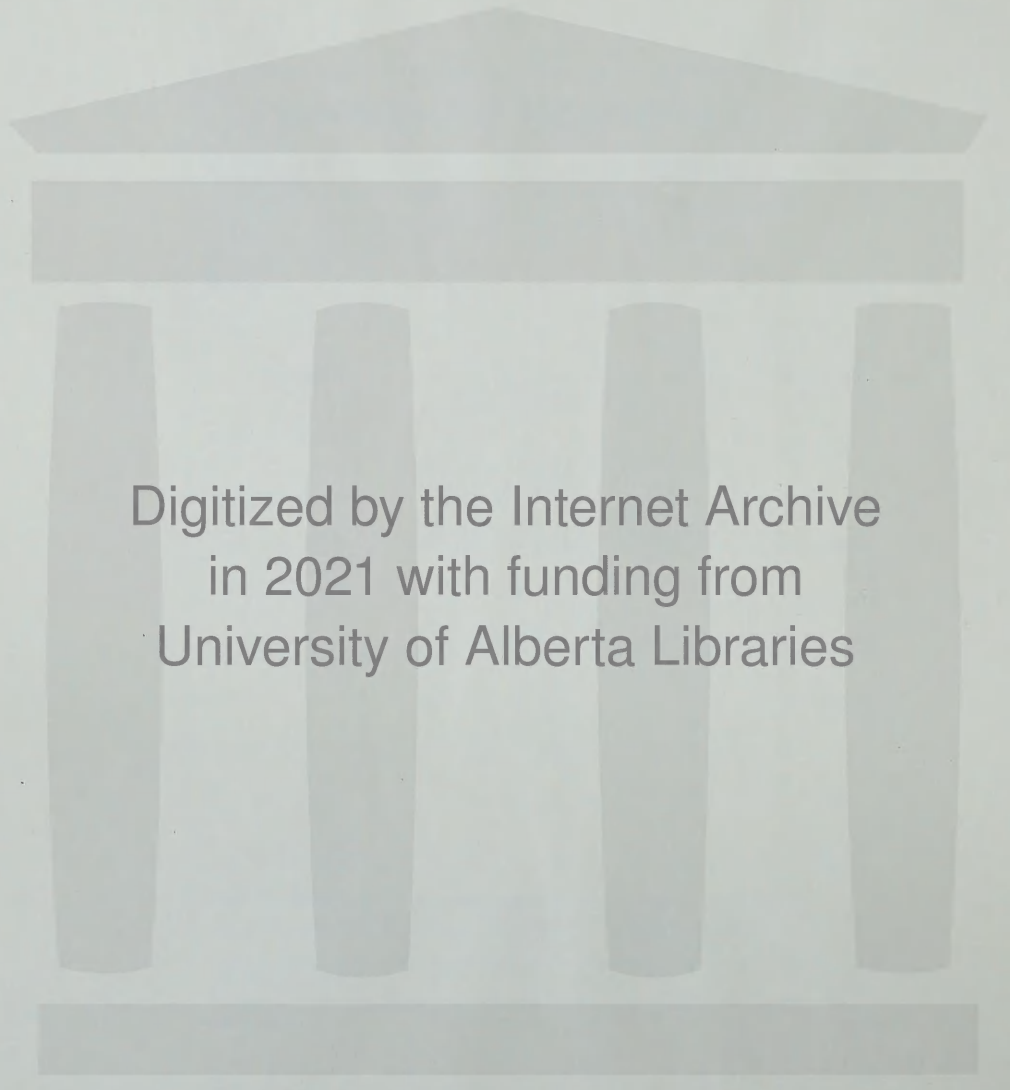
[illegible]

1. Teachers should see that the pupil's name is clearly written in ink in the spaces above in every book issued.
2. The following terms should be used in recording the condition of the book: New; Good; Fair; Poor; Bad.

1. Teachers should see that the pupil's name is clearly written in ink in the spaces above in every book issued.
2. The following terms should be used in recording the condition of the book: New; Good; Fair; Poor; Bad.

Ex LIBRIS
UNIVERSITATIS
ALBERTAENSIS





Digitized by the Internet Archive
in 2021 with funding from
University of Alberta Libraries

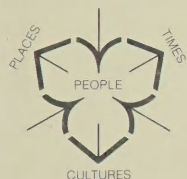
<https://archive.org/details/peopleplacesprodgros>

Ruth H. Grossman

Consultant George O. Roberts

John U. Michaelis

An Elementary School Social Studies Program



Directors

Richard E. Gross, Stanford University

John U. Michaelis, University of California, Berkeley

Phillip Bacon, University of Houston



Addison-Wesley Publishing Company

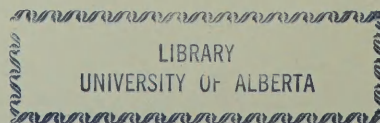
Menlo Park, California Reading, Massachusetts London

Amsterdam Don Mills, Ontario Sydney

Copyright © 1976 by Addison-Wesley Publishing Company, Inc.
Philippines Copyright 1976.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. Printed in the United States of America. Published simultaneously in Canada.

ISBN 0-201-42473-8
ABCDEFGHIJK-KP-810798765



PEOPLE: CULTURES, TIMES, PLACES is based on the inquiry-conceptual approach. This approach, which encourages students to use inquiry processes to investigate content and arrive at conceptual understandings, is the foundation of the student book as well as the Teachers' Editions.

The books, media kits, and other materials in the PEOPLE Program present abundant data, or facts. At all levels in the program, students are first presented with facts pertinent to settings with which they are familiar. At the primary levels, such settings involve the students' own families, school, neighborhood, and community. Students are then asked to deal with unfamiliar settings—families, schools, neighborhoods, and communities in different parts of the world. At the intermediate and upper elementary levels, students generally investigate familiar settings—their own city, geographic region, nation, or historical period—and then investigate other cities, regions, nations, and historical periods.

Content, then, is an important part of the PEOPLE Program. And the content has been carefully selected for appropriateness to grade level, ability to capture the interest of students, and relationship to the social sciences. Content is also the foundation for achievement of the program's four main goals:

1. Development of social science concepts and generalizations.
2. Development of inquiry processes.
3. Development of skills (map skills; graph, table, and chart skills; language acquisition and reading ability).
4. Development of students' awareness of their own values and attitudes as well as those of others to prepare them for active participation as citizens of a democracy.

Goals of the Program

Concepts and Generalizations

The PEOPLE Program provides not only abundant facts, or content, but a method of organizing facts. Facts form the basis for the development of concepts. Concepts are ideas that have universal application. The PEOPLE Program emphasizes 12 basic concepts, each drawn from one or more of the social sciences:

1. *Roles.* Roles are recognized ways of behaving and appearing. Some roles are recognized by the institutions of society. These are often related to age, kinship, work, or ceremony.

2. *Values.* Values are standards which influence choice. Individuals, social groups, and institutions make choices in many ways: slowly and carefully; quickly and carelessly; out of habit, custom, or precedent; unwittingly or unintentionally. However they choose, their choices reveal their values.

3. *Institutions.* Institutions are structures that organize and regulate social attitudes, beliefs, and behavior. They provide roles and values for their members. Among the important social areas regulated by institutions are family life, education, economics, politics, and religion.

4. *Culture.* Culture is the way of living—of doing, thinking, feeling, talking, believing, and knowing—that characterizes a social unit. It encompasses such things as language, social and kinship structure, knowledge, law, religion, art, and politics. Culture is learned. It is passed on from person to person, and generation to generation, mainly by language.

5. *Environment.* Environment is the total context in which individuals or groups live. People live in a series of overlapping environments. The natural (physical) environment includes climate, weather, terrain, plants, and animals. As people grow in numbers and technical skill, they often cause major changes in their natural environment. The social environment involves people and their actions and attitudes.

6. *Needs.* Needs are things essential for human survival. The basic human needs include food, clothing, shelter, and love.

7. *Wants.* Wants are things people desire, whether or not they are needed. Some wants may be easy to supply (a piece of paper); some wants must be supplied over and over again (tobacco, ice cream, watching TV); some are interrelated in complex fashion.

8. *Time.* Time is known through the sequence and duration of things. Sequence is expressed by words such as "next" and "before," duration by words such as "minute" and "hour." Words like "yesterday" and "next year" express both sequence and duration.

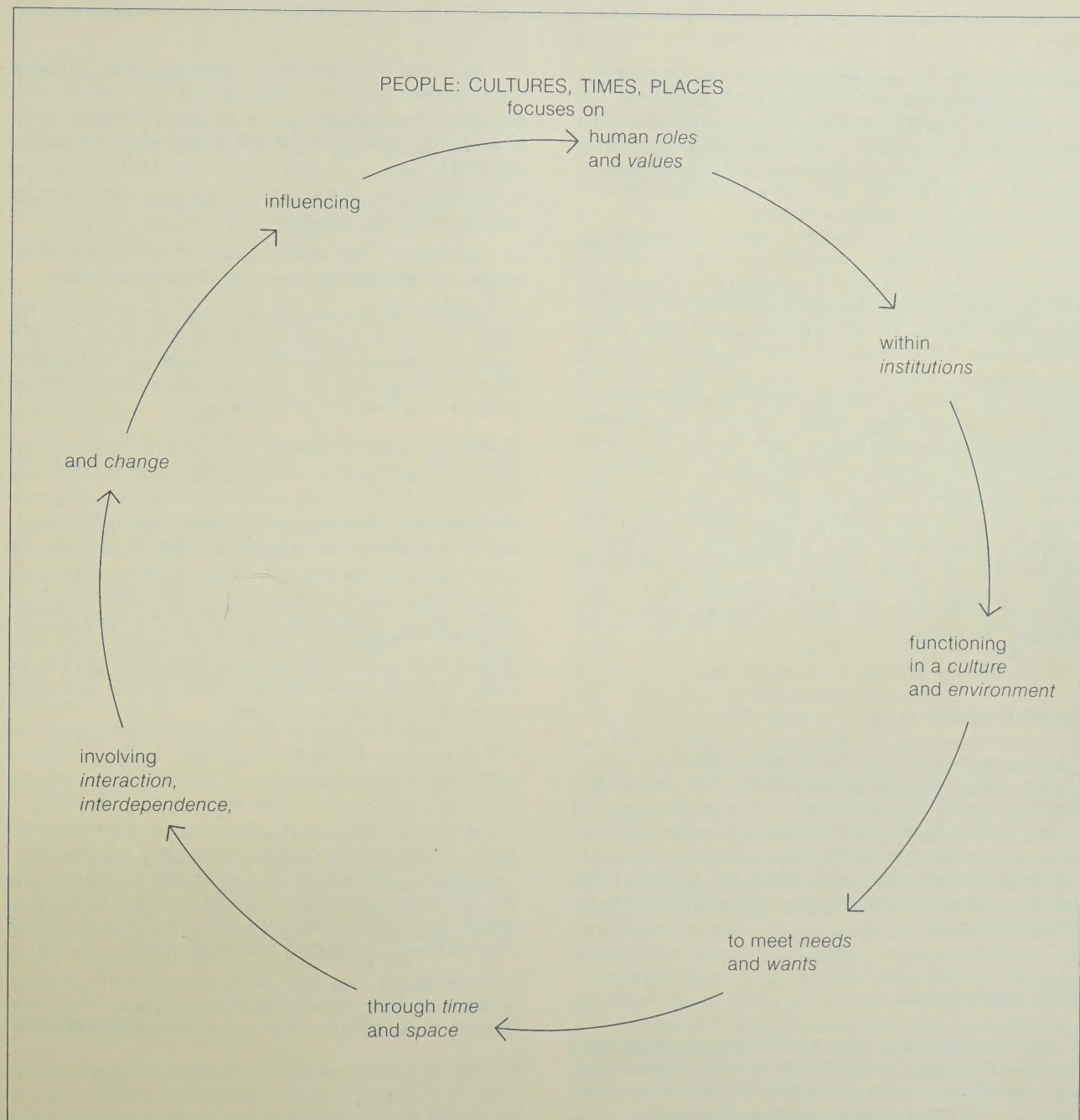
9. *Space.* Space is known through distance and direction. Distances can be stated in standard units of measure (feet, miles), in terms of time and speed (light-years, an hour's drive), and in relative terms (longer, farther). Direction can be expressed in personal terms (left, forward), by compass directions, and by grid lines, as on maps.

10. *Interaction.* Interaction is the interplay of two or more actions. Individuals interact with one another, within groups and within society. Interaction involves people's views of themselves and others as well as their actions. Feelings are part of interaction.

11. *Interdependence.* Interdependence is the mutual reliance of people on one another. Interdependence is a kind of interaction. People who depend on one another have an effect on one another.

12. *Change.* Change is any alteration. Change that affects human behavior is of special interest to social scientists. All societies experience change. At a minimum, these changes are cyclical (the seasons, the pattern of human birth and death). Other changes are discontinuous, though they may have lasting effects on behavior (wars, plagues, revolutions). Accumulative changes include gains in population, knowledge, and production.

The flow chart at the right illustrates how the concepts are interrelated.



These 12 concepts are treated throughout the program, at levels of complexity appropriate to each grade level. The development of these concepts enables students to draw generalizations, or understandings, applicable to a variety of settings. The generalizations, or understandings, intended to be drawn from each lesson, chapter, and unit are presented in the teacher's material.

For example, the concept of *needs* is introduced in *Working, Playing, Learning*, the first-grade book. One lesson in that book is intended to develop this understanding: The family group helps to meet people's need for love. Taken together, all the Lesson Understandings in that chapter help children to arrive at this Chapter Understanding: Although families differ in size and ways of doing things, all are groups in which people interact to meet their needs for food, clothing, shelter, and love. The Chapter Understandings, taken together, help children to develop this Unit Understanding: In the family group, members interact to meet their physical and psychological needs. Children arrive at the Unit Understanding by dealing with facts—specific data. Yet the Unit Understanding is universal—applicable to all people living in all times. The concept of needs continues to be treated in a similar way, but with increasing complexity, as children progress through the books in the program.

Inquiry Processes

Children arrive at concepts and generalizations by investigating settings that are familiar to them and settings that involve different parts of the world and different times. The means of investigation are thinking skills—that is, inquiry processes. Inquiry processes are merely ways of approaching facts, or of acquiring and dealing with content. There are three different levels of inquiry processes used in the PEOPLE Program:

First-Level Processes

1. *Recalling.* Recalling takes place when an answer to a question is reached simply through memory, without analysis. One statement that elicits recall follows: Tell the class what you do first when you get up in the morning.

2. *Observing.* This process is basically visual. Students may observe a picture in their textbook or a situation or an object in the classroom. The process is required in answering this question: What are the people in the picture wearing?

3. *Comparing.* This process is used when students look for similarities. For example: How are families alike?

4. *Contrasting.* This process involves recognizing differences. For example: How are these families different?

5. *Classifying.* This process involves grouping items on the basis of like characteristics. It is a sorting process, and it requires establishing guidelines or criteria. For example: Which ones go together? In which group should this be placed? Why should it be in this group?

6. *Defining.* Defining involves naming, describing, or identifying. For example: What does *specialization* mean? Or: What is a *group*?

7. *Interpreting.* This process is used in stating the meaning of something. The process requires students to use their reasoning powers and, often, to search their own experiences. An interpretation is seldom clearly right or clearly wrong, particularly if it draws on students' perceptions. For example: For many years, people have been moving to this country to live here. Make up a story about some of these people. Tell who they are and when they came. Why did they come here?

Intermediary Processes

8. *Generalizations.* This process enables students to expand understandings beyond the subject that has been presented or developed. For example: Think of all the things that people need in order to live. Now think of the places where these things are produced. How do people in cities depend on people outside of cities?

9. *Investigating.* This process involves research or accumulation of data. For example: Find out when the cotton gin was developed. How will you find this information?

Third-Level Processes

10. *Inferring*. This process requires students to reason from evidence to conclusions. The reasoning may begin with a logical premise or with a set of facts. It is often used when students are asked to talk about pictures. For example: Why do the people shown in the picture take the train into town? How else might they be able to get to work?

11. *Hypothesizing*. This process is used in making a tentative assertion that may be tested or an assumption that may be used as a basis for action. The testing of a tentative hypothesis need not be formal. It may proceed through students' examination of their own experiences. For example: Is it likely that early hunters and food gatherers traveled in groups? Why?

12. *Predicting*. In using this process, students conjecture about the possible outcomes of an existing situation. They are not expected to foretell the future, but to give a reasonable estimate of what might happen. For example: What do you think the cities of the future will be like? Why?

13. *Analyzing*. This process is used in breaking a complex whole into parts and in describing the relationship of the parts. The process may be called for by questions asking why or what. For example: Why did early traders prefer to travel by sea rather than by land? What do travelers need?

14. *Synthesizing*. This process is used in organizing and combining related facts and material to form a whole. It is the reverse of analyzing. For example: Think of the things a city needs. Think of the things a city offers. What is a city?

15. *Evaluating*. This process is used when students' values shape their response. Students use both their reasoning powers and values to formulate an answer. For example: Make a drawing or model of your ideal city. What would it have that your present city or town does not?

Skills Development

The third goal of the PEOPLE Program is the development of various skills: (1) map skills; (2) graph, table, and chart skills; (3) reading, vocabulary development, and other skills

associated with language acquisition. In addition, the teacher material in the PEOPLE Program emphasizes the development of listening skills. Viewing skills are also built by the teacher material, which makes full use of the outstanding graphics in the student book.

Map Skills

There are five different categories of map skills developed in the program: location, scale, distance, symbolization, and projection. Each of these is developed sequentially from book to book.

For example, location is introduced in *Working, Playing, Learning*, the first-grade book. At this level, children are merely to locate, by means of verbal directions, items on a simple grid and on a gridlike map. This aspect of location is reinforced in *People, Places, Products*, the second-grade book. Students again follow verbal directions to locate items on a grid and on a gridlike map. At this level, however, the grid and the map contain more squares than the grid and map in the first-grade book. In addition, cardinal directions (north, south, east, and west) are introduced. Cardinal directions are reinforced at third grade, in *Towns and Cities*. Furthermore, students are now introduced to the intermediate, or in-between, directions (northeast, southeast, northwest, and southwest).

At fourth grade, in *Regions Around the World*, students use both cardinal and intermediate directions and are introduced to the Equator—the line halfway between the North Pole and the South Pole that encircles the earth. In addition, students learn that the Equator divides the earth into two equal parts—the Northern Hemisphere and the Southern Hemisphere. Skills involving location are further extended at fifth grade, in *America: In Space and Time*. Students learn that a grid may be applied to the globe, and that every place on earth can be located with reference to the intersecting lines called parallels (lines of latitude) and meridians (lines of longitude). All skills involved in location are reinforced at sixth grade, in *The Human Adventure*.

The sequential development of map skills throughout the program is shown in the following chart. On the chart, a dot means that the particular skill is dealt with in certain books. A dot with a square around it indicates that the particular skill is introduced at that level.

Location	Working, Playing, Learning	People, Places, Products	Towns and Cities	Regions Around the World	America: In Space and Time	The Human Adventure
The concept of distance is related to the concept of scale.			■	●	●	●
A great circle represents the shortest distance between two points on a curved surface.				■	●	●
The Prime Meridian is the basic global identification line used to measure distance east and west, just as the Equator is the basic global identification line used to measure distance north and south.					■	●
Symbolization						
Because maps and globes are too small to show things as they really are, symbols are used to stand for those things.	■	●	●			
Most maps and globes use color to represent things found in the real world.	●	●	●	●	●	●
Symbols which are smaller than real things are used to represent these things on a map.		■	●	●	●	●
Some symbols look like small copies of the real things they represent, but symbols do not necessarily look like the things they represent.		■	●	●	●	●
Most maps have legends to identify for the user the meaning of the particular symbols used on the map.		■	●	●	●	●
A symbol on a map not only represents something in the real world, but it shows where that thing is located.		■	●	●	●	●
Some symbols represent natural features, such as lakes, rivers, mountains, and forests.			■	●	●	●
Some symbols represent things made by people (cities, highways, and houses).			■	●	●	●
On a given map, both features that are natural and those made by humans may be symbolized.			■	●	●	●
Maps may display a great variety of data.					■	●
Projection						
The planet on which humans live is a sphere.	■	●	●			
The globe, also a sphere, is an accurate model of the earth.	■	●	●			
In transferring the globe's surface to a flat map, the mapmaker tries to flatten a curved surface.		■	●	●	●	●
Small areas may be removed from the globe's curved surface with little tearing or twisting.		■	●	●	●	●
The larger the area of the earth's surface shown on a map, the greater the tearing, twisting, and stretching.		■	●	●	●	●
The process of taking the earth's curved surface and transferring it to a flat piece of paper is called projection.			■	●	●	●
Mapmakers select a projection related to the purpose of the map.			■	●		●
Interrupted projections solve part of the tearing and twisting problems involved in peeling off the globe's surface and placing it on a flat paper.					■	●
Changes made by the mapmaker show up most clearly when one examines the grid system of the map with the grid pattern of a globe.						■

Location	Working, Playing, Learning	People, Places, Products	Towns and Cities	Regions Around the World	America: In Space and Time	The Human Adventure
Location may be determined by using verbal directions.	☐	●	●			
Location may be determined by using a grid system.	☐	●	●	●	●	
Cardinal directions are basic guideposts to location.		☐	●	●	●	
Cardinal directions may be applied to the locating of places on a grid system.		☐	●	●	●	
Cardinal directions may be used to locate places on maps.		☐	●	●	●	●
Cardinal directions may be used to locate <i>real</i> things and <i>real</i> places.			☐	●	●	
Intermediate, or in-between, directions may be used to locate places more specifically than they can be located by using only cardinal directions.			☐	●	●	●
Cardinal directions and intermediate, or in-between, directions may be used to locate places, to determine the relative location of two given places, and to explain how to get from one place to another.			☐	●	●	
The concepts of north and south are related to location on the earth as seen on the globe, a model of the earth.			☐	●	●	
Halfway between the North Pole and the South Pole a line is drawn that encircles the earth. It is called the Equator. The Equator divides the earth into two equal parts, the Northern Hemisphere and the Southern Hemisphere.				☐	●	●
The concept of a grid system is generally applied to the globe.					☐	●
Every place on earth may be located with reference to the intersecting lines called parallels (lines of latitude) and meridians (lines of longitude).					☐	●
Scale						
Things that are small may be magnified—made to appear larger.	☐	●	●			
Things that are big may be reduced—made to appear smaller.	☐	●	●			
The round earth is too big to be seen all at once.		☐	●			
The classroom is too big to be drawn on a piece of paper.		☐	●			
Maps are almost always smaller than reality.		☐	●	●		
How small a map is in relation to the reality that it depicts is scale.			☐	●		
The scale on a map tells how much smaller the map is than the area of the real earth that is shown. The measuring stick is an indicator of how much smaller.			☐	●	●	●
Scale can be expressed in ways other than by using a measuring stick.				☐	●	●
The larger the scale, generally the closer the map is to the area depicted.				☐	●	●
The larger the scale, the smaller the area the map can show.				☐	●	●
The smaller the scale, the greater the area the map can show.				☐	●	●
Distance						
Distance can be measured in many ways.	☐	●	●			
Short distances are usually measured in inches, feet, yards, or steps (or millimeters, centimeters, or meters).		☐	●	●	●	
Long distances are usually measured in terms of miles (or kilometers).		☐	●	●	●	

Graph and Table Skills

Graph and table skills, like map skills, are developed sequentially from level to level throughout the program. At first grade, students are introduced to simple tables. At second grade, work with tables is reinforced, and students are introduced to elementary picture graphs. Pie (or circle) graphs, bar graphs, and line graphs are introduced at the third grade. At fourth, fifth, and sixth grades, students work with each of these kinds of graphs and are asked to use data to construct their own graphs.

In working with any graph, students face three levels of difficulty: the literal, interpretive, and critical. The level of least difficulty is the literal level. At this level, students are asked only to "read" what they see. Each question asked has an answer actually visible in the table or graph shown. The next level of difficulty is the interpretive level. At this level, students are asked not only to read what they see, but also to compare the data shown in the table or graph. The level of greatest difficulty is the critical level. Students are asked to *evaluate* the data and the table or graph itself. At this level, students check for accuracy and reliability.

The following is an example of questions involving each level, based on a pictorial graph.

Pets Owned by Students in
Mr. Smith's Room



Literal: How many dogs are owned by the students in Mr. Smith's room? What does this picture graph show?

Interpretive: How many more fish than dogs are owned by the students in Mr. Smith's room? The students of Mr. Smith's room own the same number of two kinds of pets. What are these pets?

Critical: How many turtles are owned by the students in Mr. Smith's room? Does this graph show all the pets owned by the students in Mr. Smith's room?

In the primary grades, students are asked to operate only at the literal level. The interpretive level is introduced at third and fourth grades. At fifth and sixth grades, students are asked to operate at all three levels of difficulty. However, at any one grade, different students may be able to operate at different levels. A fourth-grader, for example, may work with a graph at the critical level, whereas some sixth-graders may operate only at the interpretive level. The PEOPLE Program allows for this by presenting a variety of questions about each table and graph, thus permitting students within the same class to work at different levels.

Reading and Language Acquisition

The PEOPLE Program emphasizes not only those skills traditionally associated with the social studies (map, graph, chart, and table skills), but also language skills. Language skills are developed, first of all, by means of the student books, each of which has been written at or below grade level. The student books build vocabulary by introducing new words within the appropriate context and then reinforcing understanding of such words through repeated use.

The teacher material contains activities devoted solely to language skills. At the primary level, reading readiness is emphasized. Students are asked to perceive details, shape, and size; to represent items visually; to recognize and repeat sounds; and to express themselves descriptively. Vocabulary is built by encouraging students to interpret words through group and individual activities. At the middle and upper elementary levels, the teacher material emphasizes vocabulary development through activities centered around work with the glossaries in the student books and through written expression.

Attitudes, Values, and Feelings

The fourth goal of the PEOPLE Program involves the affective domain—attitudes, values, and feelings. Each of these is an important part of the social studies curriculum, for each affects the choices people make and thus the way they act. In the PEOPLE Program, students are encouraged to recognize their own attitudes, values, and feelings.

At the primary level, awareness of attitudes, values, and feelings is developed through simple questioning techniques that ask students, for example, how they express love in their family group and how people may disagree yet still like and respect one another. At the middle and upper elementary grades, students encounter questions such as these:

How do you think you would feel if a large group of new students joined your class? Do you think you would be right in feeling this way? Why?

Discuss how important it is to each of us for other people to like the things we like. Let the students share experiences concerning people who liked or disliked something that was important to them. Then ask: How did you feel? If you could have that experience again, would you do the same thing? How important is it to tell the truth about things we like or dislike?

Beginning at the middle grades, students are asked questions that require them to project themselves into an unfamiliar situation. They are asked, for example, to express their opinions of the Masai value of freedom.

In discussing such questions, students become aware of differences among people and thus learn to respect the attitudes, values, and feelings of others. Respect for individual differences is essential for active participation in a democratic system. If students are unaware of the values on which American democracy is based, they will be poorly prepared to support and act upon those values.

Using the Teachers' Editions

The Teachers' Editions for PEOPLE: CULTURES, TIMES, PLACES have been designed to enable teachers to achieve the four goals of the program, to correlate easily with the student books, and to offer instructional flexibility. Each lesson in the Teachers' Editions provides means of attaining the program's goals: development of conceptual understandings; use of inquiry processes; development of map, graph, and language skills; and awareness of values, attitudes, and feelings.

Teacher material correlates easily with the student books, for lessons appear in columns alongside the appropriate student text. Thus, teachers have both student and teacher material before them at all times.

Instructional flexibility is furnished by activities so numerous teachers may choose from among them to meet their own instructional goals and the needs of individual students. Alternative Activities, appearing in each lesson, provide additional flexibility.

The format of the Teachers' Editions follows the general format of the student books. Material in each is divided into units, chapters, and lessons.

Unit Material

Overview. The teacher material presents a unit Overview at the beginning of each unit of the student books. The Overview is a brief summary of the content of the unit and an explanation of its conceptual structure.

Unit Understanding. The Unit Understanding is a large generalization derived from the content of the unit and from the basic concepts of the program—roles, values, institutions, culture, environment, needs, wants, time, space, interaction, interdependence, and change.

Main Concepts. These are the particular concepts which are emphasized within the unit and which form the basis for the Unit Understanding.

Related Concepts. Related Concepts include those of the basic 12 concepts dealt with but not emphasized within the unit.

Skills Development. Skills Development details both the kinds of skills (map; graph, table, and chart; and reading and language) and the specific skills developed throughout the unit.

Chapter Material

Chapter Understanding. The teacher material contains a Chapter Understanding at the beginning of each chapter in the student books. The Chapter Understanding is a generalization more specific than the Unit Understanding. All Chapter Understandings combine to form a Unit Understanding.

Concepts. Under this heading appear those of the basic 12 concepts appropriate to the chapter.

Skills Symbols. Within Teachers' Editions, activities that involve particular kinds of skills are keyed for easy reference. The heading Skills Symbols explains the key system. Activities involving map skills are keyed with a circle (symbol ●). Activities involving graph, table, and chart skills are keyed with a square (symbol ■). Activities involving reading readiness, vocabulary development, and other language skills are keyed with a triangle (symbol ▲).

Evaluation Strategies. These strategies include references to specific activities that may be used either for formal or informal evaluation. Beginning at the third grade, Evaluation Strategies include short objective tests appearing in the teacher material at the end of each chapter.

Chapter Unifying Activities. Chapter Unifying Activities involve material in the entire chapter and are designed to provide ongoing work for individual students or groups of students. Suggestions for beginning Chapter Unifying Activities are made at appropriate points within lessons.

Introductory Lesson. The Introductory Lesson prepares students for the first lesson of a chapter. Introductory Lessons may be used either for motivating students and/or diagnosing students' existing knowledge of the material to be covered in a chapter.

Lesson Material

Objectives. Each lesson in the teacher material begins with the Objectives of the lesson. Every lesson Objective correlates to a particular activity in the lesson and involves the use of one of the 15 inquiry processes of the program (recalling, observing, comparing, contrasting, classifying, defining, interpreting, generalizing, investigating, inferring, hypothesizing, predicting, analyzing, synthesizing, and evaluating). Valuing is an additional Objective which, when

used, appears at the end of the Objectives. The Objectives, taken in sequence, lead to the Lesson Understanding.

Lesson Understanding. The Lesson Understanding, which students reach by fulfilling the listed objectives, represents some facet of the Chapter Understanding.

Concepts. These include the concepts especially applicable to the lesson.

Materials Needed. This appears only when applicable—when it is necessary for the teacher to prepare or gather specific materials for activities within a lesson.

Developing the Lesson. This section involves the core of the lesson, for it contains the numerous activities which teachers may use (or from which they may choose) to deal with the student text and to help students arrive at the Lesson Understanding. In addition to a variety of activities, this section contains Alternative Activities. Alternative Activities are of three basic kinds: (1) activities for able students; (2) activities for students of less ability; (3) activities that are neither more nor less difficult than the main activity but that may be used by teachers who want students to work with minimal direction, who have students of particular socioeconomic backgrounds, or who want to give students additional work with skills. All activities, alternative or main, are designed to help students arrive at the Lesson Understanding.

Chapter Wrap-Up Activities

Beginning at the third grade, the Teachers' Editions contain Wrap-Up Activities at the ends of chapters. These activities, sometimes an extension of the Chapter Unifying Activities, are often useful for purposes of evaluation.

Teachers' Resource Center

At the end of the teacher material are Teachers' Resource Centers, which provide additional material for individual or group work. These Centers include bibliographies for both the student and the teacher. They also include data, activities, maps, and artwork that teachers may trace and/or copy for their students. Each item in the Teachers' Resource Centers is referred to in appropriate lessons in the Teachers' Editions.

People, Places, Products, one of the books in the PEOPLE: CULTURES, TIMES, PLACES Program, is designed for use at the second grade. The book treats five kinds of communities, each with a different economic base. By comparing natural resources, technology, work roles, and culture among different communities, students begin to understand why people live in communities, how they make their livings, why they have different jobs, and how they depend on one another to meet their needs and wants. In addition, children are asked to investigate their own community and to compare it with other communities.

People, Places, Products contains five units. Each unit (and each chapter within a unit) develops a generalization, or understanding. The following is a list of unit and chapter understandings for the book:

Unit and Chapter Understandings

Unit Understanding:

Although people of fishing communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

Chapter Understandings:

Because of technology, people of fishing communities can make use of their natural resources to meet needs.

Because fish processing involves technology and specialization, people of fishing communities depend on one another and on people in other communities.

Although people of fishing communities may have different cultures, they share the same needs.

Unit Understanding:

Although people of grain-farming communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

Chapter Understandings:

Because of technology, people in grain-farming communities can make use of their natural resources to meet needs.

Because grain processing involves technology and specialization, people of grain-farming communities depend on one another and on people in other communities.

Although people of grain-farming communities may have different cultures, they share the same basic needs.

Unit Understanding:

Although people of cattle-raising communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

Chapter Understandings:

Because of technology, people in cattle-raising communities can make use of their natural resources to meet needs.

Because meat and dairy processing involve specialization and technology, people in cattle-raising communities depend on one another and on people in other communities.

Although people of cattle-raising communities may have different cultures, they share the same basic needs.

Unit Understanding:

Although people of lumbering communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

Chapter Understandings:

Because of technology, people in lumbering communities can make use of their natural resources to meet needs.

Because lumber processing involves technology and specialization, people of lumbering communities depend on one another and on people in other communities.

Although people of lumbering communities may have different cultures, they share the same basic needs.

Unit Understanding:

Although people of cloth-manufacturing communities may have different cultures, in each community people meet their needs by depending on one another, on technology, and on people in other communities.

Chapter Understandings:

Although people dress differently, clothing is a basic human need.

Because the manufacturing of cotton clothing involves technology and specialization, people of cotton-growing communities depend on one another and on people in other communities.

Because the processing of wool, silk, and synthetics involves technology and specialization, people in communities that produce these products depend on one another and on people in other communities.

Although people of cloth-manufacturing communities may have different cultures, they share the same basic needs.

The first unit of *People, Places, Products* highlights two communities, one in Norway and the other in Japan. In each community, fishing is the economic base. Children examine the natural resources common to fishing communities and the kinds of tools and equipment used by people in these communities. They also explore interdependence among people of fishing communities—ways in which people work together to catch and process fish. Finally, students examine cultural similarities and differences among people of communities in which fish is the basic resource.

The second unit in the book centers around grain-farming communities. Students examine the environment, natural resources, and the tools and equipment used by people in a wheat-growing community in the United States. They compare and contrast this community with a rice-growing community in Thailand. In addition to comparing natural resources, environment, and technology, students compare the life styles and cultures of people in the two communities.

In the third unit, students examine cattle-raising communities, one in the United States and the other in Argentina. Children study resources and environment and compare the work roles of cowboys and gauchos as well as other people involved in cattle raising. Students also explore meat and dairy processing and the variety of products supplied by cattle.

Lumbering communities are the focus of the fourth unit. Here students examine a community in British Columbia and one in the Ivory Coast. Again, they explore work roles, tools and equipment, natural resources, and finally compare ways of life in different lumbering communities.

The last unit of the book deals with cloth-manufacturing communities. Students first explore the reasons why people wear different kinds of clothing and how clothing differs around the world. They then study two communities in which cotton is raised, one in the United States and the other in India. After they have studied cotton and cotton processing, children examine the production of other kinds of fabrics—wool, silk, and synthetics. Finally, they investigate cultural similarities and differences among people living in cloth-manufacturing communities.

At the end of each unit in *People, Places, Products* is a Review. Each Review is made up of photographs and questions and may be used as an evaluative device. The teacher material gives suggestions for using the Review for both formal and informal evaluation.

Along with the study of communities, *People, Places, Products* gives children opportunity to develop a variety of important skills. By second grade, children have been introduced to basic map skills dealing with the earth, the globe, and the ways things are represented on maps. The Resource Center at the end of *People, Places, Products* gives children an opportunity to reinforce these basic skills and to build upon them. In the ten lessons of the Resource Center, children deal with map skills centered around these understandings: The earth is the home of people; the earth is round; a globe is a model of the earth; day and night are caused by the earth's rotation on its axis; there are four main directions—north, south, east, and west; flat maps can show the entire earth; symbols are used to represent things on maps; maps show the relative size of objects; maps show location and distance; maps often have legends, which explain symbols used on a particular map.

Graph, table, and chart skills are also developed throughout *People, Places, Products*. Children are introduced to simple pictorial graphs and tables and to simple timelines.

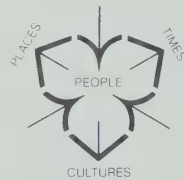
At second grade, many children have few reading skills. Thus, activities in the teacher material make use of the text, vocabulary words are dealt with and defined as children engage in activities, and photographs supply content for those whose reading skills are undeveloped. In addition, the teacher material provides suggestions for reading readiness training and for vocabulary development.

Second grade is an important year for most children. They are becoming familiar with school and are still in the

process of developing the basic skills that will provide the foundation for their future education. *People, Places, Products* is designed to help them develop the skills associated with reading, interpreting maps and other data, listening, and viewing. The book is also designed to take advantage of the second-grader's growing interest in the world. The first-grade book in the PEOPLE: CULTURES, TIMES, PLACES Program centers around the child's immediate environment—the school and the family—and introduces children to the community. *People, Places, Products* extends the material in this book—giving children an opportunity to explore communities around the world but beginning and ending such exploration by dealing with the familiar and the concrete.

People, Places, Products

An Elementary School Social Studies Program



Directors

Richard E. Gross, Stanford University

John U. Michaelis, University of California, Berkeley

Phillip Bacon, University of Houston

People, Places, Products

Ruth H. Grossman

John U. Michaelis

Consultant

George O. Roberts



Addison-Wesley Publishing Company

Menlo Park, California Reading, Massachusetts London Amsterdam

Don Mills, Ontario Sydney

The publisher gratefully acknowledges the contribution of Field Enterprises Educational Corporation, publishers of *The World Book Encyclopedia*, to the development of the maps and diagrams in this volume.

Elihu Blotnick Cover photo

Seymour Chwast Unit opener illustrations

Lynda Banks pages: 152, 153

Copyright © 1976 by Addison-Wesley Publishing Company, Inc.
Philippines Copyright 1976.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. Printed in the United States of America. Published simultaneously in Canada.

ISBN 0-201-042472-X.
ABCDEFGHIJK-DO-810798765

People, Places, Products is a part of People: Cultures, Times, Places, an elementary school social studies program. The program is based on an instructional model developed by John U. Michaelis, Professor of Education at the University of California, Berkeley. Richard E. Gross and Phillip Bacon serve with Dr. Michaelis as directors of the program. Dr. Gross is Professor of Education and Director of Teacher Education at Stanford University. Dr. Bacon is Professor and Chairman in the Department of Geography at the University of Houston.

Ruth H. Grossman is Professor of Education at City College, City University of New York. George O. Roberts is Professor in Comparative Culture and Assistant Vice-Chancellor for Academic and Student Affairs at the University of California, Irvine.

Contents

Fishing Communities	8
1 Fishing	10
2 Fish Processing	18
3 People of Fishing Communities	24
Review	30
 Grain-Farming Communities	 32
1 Grain Farming	34
2 Grain Processing	42
3 People of Grain-Farming Communities	50
Review	58
 Cattle-Raising Communities	 60
1 Cattle Raising	62
2 Meat and Dairy Processing	70
3 People of Cattle-Raising Communities	74
Review	80
 Lumbering Communities	 82
1 Forest Work	84
2 Lumber Processing	92
3 People of Lumbering Communities	102
Review	108

Cloth-Manufacturing Communities	110
1 Kinds of Clothing	112
2 Cotton	116
3 Wool, Silk, and Synthetics	122
4 People of Cloth-Manufacturing Communities	128
Review	136

Resource Center	139
1 Exploring Space	140
2 The Planet Earth	142
3 Using a Globe	143
4 Day and Night	144
5 Using Maps	146
6 A Floor Plan	150
7 A Map of a Lumber Mill	151
8 Using a Grid	152
9 Making a City Map	154
10 Using a Map Legend	156

Photograph Acknowledgments	159
----------------------------	-----

Fishing Communities

OVERVIEW

This unit highlights two communities, one in Norway and one in Japan. In each community, fishing is the economic base. The first chapter in the unit explores fish as a natural resource, the technology used in fishing, and the problems fishers face. The chapter entitled Fish Processing deals with the utilization of fish through technology and job specialization. Finally, People of Fishing Communities examines cultural similarities and differences.

We suggest that before you begin the unit, you cover with your students Lessons 1-5 in the student Resource Center (pages 140-149). Lesson 5 is especially important, for this lesson develops the concept of *country* and points out the location of particular countries in the world.

UNIT UNDERSTANDING Although people of fishing communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

MAIN CONCEPTS culture, environment, interdependence, needs, roles

RELATED CONCEPTS interaction, values, wants

SKILLS DEVELOPMENT

Children develop map skills based on these understandings: The earth is the home of people; the earth is a sphere; the globe is a model of the earth; and maps make use of symbols to stand for real things. Map skills are developed by correlating lessons in the Fishing unit with lessons in the student Resource Center.

Children are encouraged to develop elementary graph skills by making simple pictorial graphs.

Reading readiness and vocabulary development are provided for by a variety of activities centering around words and word usage. Expressive language skills are encouraged through the use of questioning techniques that require more than a yes or no answer.

See Skills Symbols at the beginning of each chapter.



Fishing Communities



Fishing

CHAPTER UNDERSTANDING

Because of technology, people of fishing communities can make use of their natural resources to meet needs.

CONCEPTS environment, needs, values

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

The first activity in the Introductory Lesson may be used as a pre-test that is both motivational and diagnostic.

Activities 3, 5, 6, and 7 in Lesson 1; Activities 5, 6, and 7 in Lesson 2; and Activities 1, 2, 10, and 11 in Lesson 3 are especially appropriate for purposes of evaluation.

CHAPTER UNIFYING ACTIVITIES

1. Begin a wall chart entitled "How Are Fish a Resource?" Have children draw and cut from magazines pictures showing various fish that are sources of food as well as products made from fish (for example, shoes from sharks; buttons from abalone; oil paints and varnishes from sardines, sharks, and herrings; glue from by-products of fish; dried meals and concentrates for animal feeds from scraps from various fish). You may extend this activity throughout the unit.

2. As a class project, students may develop an aquarium. Committees may be chosen to select the tank, type of fish, plants and decorations, type of gravel, and so on. Children may sign up to feed the fish and maintain the tank.

INTRODUCTORY LESSON

● Ask students whether they have ever been fishing or out in a boat. Encourage them to tell about their fishing and boating experiences. Also ask students whether they have pet fish at home or have seen tanks of fish in restaurants or stores. Have them describe what they've seen. Finally, have students tell everything they know about fish and fishing. List their answers on a large sheet of paper which can be displayed in the

classroom for at least several days (or for the duration of the unit).

Now tell students to open their books to pages 8 and 9. (If the *People, Places, Products* Media Kit is available, display the study print.) Have them describe what they see in each picture. Ask: Can you guess where the fishers are from? Tell the children that the men are from Japan and Norway. Have them find these countries on the maps on page 147 in the student Resource Center. If you wish, review with children Activity 1, Lesson 5 in the student Resource Center to be certain students understand what a country is.

Lesson 1 (pages 10-11)

OBJECTIVES

Analyze why people build communities near water. Recall what is found in the ocean and why fish are useful to people. Infer the reasons why fishing is important in Japan and Norway. Interpret how fishing can be efficiently and easily performed. Define the word *needs*. Classify resources into those made by humans and those that are natural. Synthesize information to understand that fish are a natural resource, which help people to meet their needs.

LESSON UNDERSTANDING Fish are a natural resource, which help people to meet their needs.

CONCEPTS environment, needs, wants, space

MATERIALS NEEDED classroom globe

DEVELOPING THE LESSON

1. *Analyzing.* Have students study the pictures on page 10. Then ask one student to read aloud the first question on that page. Ask the class for responses. (Encourage children to give as many responses as they can.)
2. *Recalling.* Read to the class the second question on page 10. Ask children who have seen or heard about the ocean to describe the things they remember. List everything named on the chalkboard. Then ask: Of the things we've listed on the chalkboard which can be eaten?

3. *Inferring.* Have students look once again at the pictures on page 10. Have them discuss differences in the two villages. Ask: Do you think these villages are in the same place? Are



1

Why do you think these towns are near the water?

What do people get from the sea?



What are the people using to catch fish?
How can you tell?

Pictures T: fishers on shore pulling in nets (Japan); B: fishers hauling catch into boat (Norway).

they in the same country? Why do you think so?

Tell the children that these fishing communities are in Norway and Japan. (If you wish, have children refer once again to the maps on page 147.) Then have children refer to the top map on page 148. Have students determine why fishing is very important in Japan and Norway. Finally, using the classroom globe, point to a country like Switzerland. Ask why fishing might not be important in this country.

4. *Interpreting.* Have children study the pictures on page 11. Ask one student to read aloud the question on the page. Have the class discuss why nets are used. Ask: Why do people fish with poles? Why do they use nets? Which is easier? Why? Which would be more fun? Which would you rather do? Why?

▲5. *Defining.* Ask: What do people need in order to live? Accept all responses, listing them on the chalkboard. Then say: Which of these items are alike? Help children point to different kinds of foods. Write the head "Food" on the chalkboard. Then help children find items having to do with clothes, and list these on the chalkboard under "Clothing." Repeat this process for "Shelter" (or "Houses," if this is easier for the children). Point to each head, and ask what would happen to a person who did not have this.

▲6. *Classifying.* Ask the class whether anyone knows the meaning of the word *resource*. Let children guess, then explain that a resource is anything that helps people to meet their needs. Ask students to recall the three basic needs. Have students name as many resources as they can (automobiles, trees, even other people). List each item on the chalkboard. Then ask students to pick out the resources that are made by people. On the chalkboard put a check by these items. Next have students point out the resources that are natural—that are not made by humans but are found in their surroundings. Put an x by these items.

7. *Synthesizing.* Ask: Are fish a resource? What needs do they help people to meet? Are fish a natural resource? Why? (You may wish to begin Chapter Unifying Activity 1 at this point.)

Lesson 2 (pages 12–13)

OBJECTIVES

Infer how boats are helpful to fishers.
Observe that fishers must keep nets in good repair. *Interpret* various activities that take place on a large fishing vessel.
Define the word *tools*.
Generalize that fishers depend on tools. *Generalize* that tools are necessary even in recreational fishing.

Valuing. Students are asked to tell what they would most like and dislike about being fishers.

LESSON UNDERSTANDING People can catch fish because of technology.

CONCEPTS needs, values, wants

MATERIALS NEEDED *People, Places, Products* Media Kit (if possible), pictures illustrating activities on a fishing vessel (optional); a magazine devoted to the sport of fishing (optional).

DEVELOPING THE LESSON

1. *Inferring.* Have the children look at the pictures on page 12. Then read the questions to the class. Ask: Why do fishers go far out in the ocean in large boats? How do you think they use their boats to find fish? How do they use their boats while they are fishing? Tell students that sometimes fishers on large vessels spend many days and nights on the ocean looking for fish. Ask: What would you need to have on a boat if you had to live on it for several days?

2. *Observing.* Ask students to look at the pictures on page 13. Have one student read aloud the first question. Ask the class for responses. Then have another student read the second question. If students have difficulty answering it, ask: What might happen to nets? How might these things happen? Why are nets important to fishers?

3. *Interpreting.* Tell the children that they are going to pretend they are on a fishing boat far out at sea. Then divide the class into small groups. One group might pretend they are fishers hauling in nets. Another might pretend to be people who operate the ship—captain, radio operator, and so on; still another might pretend to be galley workers; and so on. Simply have students act out for a few minutes the movements of these people.



What are the boats used for?
What do the people do on the boats?



What are these people doing?
Why is this work needed?

Alternative Activity: If you have access to the *People, Places, Products* Media Kit, show Frames 1–54 of the filmstrip “Fishing.” If you don’t have the kit, bring pictures to class, or ask students to draw their own. The pictures should illustrate various activities on a large fishing vessel.

4. *Valuing.* Ask: What seems to be easiest about fishing work? Why? If you were a fisher, what would you enjoy most? Why? What seems hardest? Why? What wouldn’t you enjoy doing? Why?

▲ 5. *Defining.* Ask students: What do fire fighters need to do their work? What do police officers need to do their work? What do we call the things people need to do their work? If no child answers “tools,” say: We call these things *tools*. Ask: Are machines tools? Why? Can automobiles be tools? Why?

Now ask each child to draw a picture of one tool a fisher needs to do his or her work. When the drawings have been completed, ask one child to show his or her picture. Then ask how many students drew this same tool. Collect all the pictures that show the same tool. Proceed in this manner until all the children’s drawings have been collected. List the tools drawn on the chalkboard.

▲ *Alternative Activity:* Write the word *tool* on the chalkboard. Explain that a tool is something that helps people do their work. Ask: What tools do fire fighters use? What tools do police officers use? Then divide the class into small groups. Ask each group to think of tools fishers use. Have each group report to the class as a whole.

6. *Generalizing.* Ask: Can fish be caught without tools? Why? Are boats tools? Why? Are nets tools? Why? Have children name other tools.

7. *Generalizing.* Have a few students bring to class some of the fishing equipment used by them or their families. (A parent may be willing to come to class to explain how fishing rods, reels, and so on are used.) After students have examined the equipment, ask: Could people fish just for fun if they did not have tools? Why?

Alternative Activity: Some magazines are devoted to the sport of fishing. Bring one to class, and pass it around. Ask: Could people fish just for fun if they did not have tools? Why?

Lesson 3 (pages 14–17)

OBJECTIVES

Recall the uses of fish. *Infer* that because the supply of fish is limited, fish must be protected. *Recall* how fish may be endangered. *Generalize* that insecticides and industrial wastes endanger fish. *Analyze* why people study the ocean and ocean life.

Hypothesize what might happen at sea during a storm. *Interpret* how fishers feel during a storm at sea. *Analyze* why storms cause problems for fishers. *Observe* the results of a storm. *Classify* problems fishers face into those caused by the natural environment and those caused by people. *Generalize* that because fish are natural resources and are in limited supply, they must be conserved.

Valuing. Students are asked to examine their own values about protecting fish and other resources in the natural environment.

LESSON UNDERSTANDING Because fish are natural resources and are in limited supply, they must be conserved.

CONCEPTS environment, needs, values, wants

MATERIALS NEEDED dish containing water; recording of *The Flying Dutchman* (optional)

DEVELOPING THE LESSON

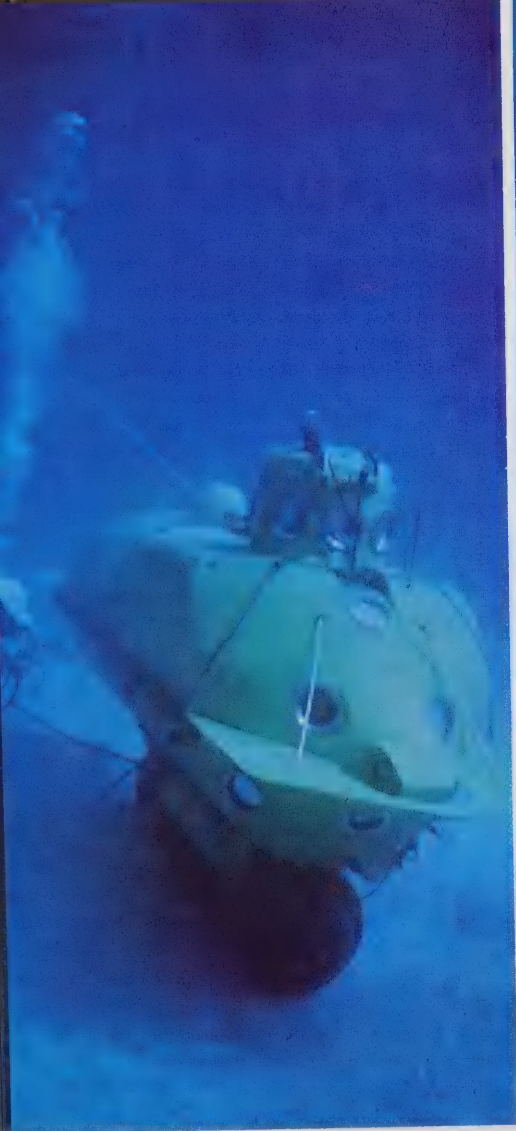
1. *Recalling.* Read to the students the first question on page 14. In a brief class discussion, have them summarize the uses of fish. Reinforce their understanding that fish are a natural resource.

Alternative Activity: If you are using Activity 1 in the Chapter Unifying Activities, you may ask the children to refer to the wall chart to answer the first question on page 14.

2. *Inferring.* Ask students who have gone fishing whether they were permitted to catch as many fish as they wanted. Also ask whether they were permitted to catch very small fish. Then ask the class as a whole: Why do you think there are laws keeping people from catching too many fish? from catching fish that are very small? What might happen if people caught all the fish they wanted? What might happen if all the young fish were killed? Is there a limit



Why are fish important?
What can harm fish?



Why do people study fish?
How could this work help other people?

Pictures L: deep-sea diver outside minisub; R: divers with samples from coral reef (the cage provides protection against sharks).

to the amount of fish there are in the world? (If children do not understand the word *limit*, explain it to them.)

Ask for reasons for answers.

3. *Recalling.* Read to the class the second question on page 14. Ask students whether any of them have had a pet fish. Ask those who have had pet fish whether their fish ever became sick. Have the children explain what happened. (You may want to begin Chapter Unifying Activity 2 at this point; the activity will help children to understand what fish need and what endangers them.)

Alternative Activity: Read to the class the second question on page 14. Ask for students' responses. If they do not mention objects and garbage people sometimes put into the water, call attention to this danger to fish.

4. *Generalizing.* Ask students what their families use to kill insects and other pests. Ask: What might happen if we sprayed insect poison near a goldfish in a bowl? Tell the children that insecticides get into rivers, lakes, and oceans. Insecticides used on crops run off into bodies of water when the crops receive rain or are irrigated. Ask students what they think happens when insecticides build up in rivers and lakes. Discuss that industrial wastes, such as oil and other chemicals, also poison fish and plants that grow in water.

5. *Analyzing.* Have one student read aloud the questions on page 15. Ask the class to look at the photographs. Discuss: What can people learn by studying fish? How might studies help people to protect fish? Is this important? Why? (Reinforce students' understanding that the supply of fish is limited.)

Alternative Activity: Ask the class: Have you ever seen TV programs or movies in which people studied some part of the ocean? What did they learn? Why did they do this? Now have one student read aloud the questions on page 15. Ask: Why do people study fish? Why do they want to protect fish?

6. *Hypothesizing.* Have students look at the picture on page 16. Ask: What happens to the ocean when there is a storm? If you blew across a dish of water, what do you think would happen? (If you wish, permit a student to try the experiment. Have the class comment on the results.)

7. *Interpreting.* Have children look again at the picture on page 16. Ask: How does this picture make you feel? Why? How would you feel if you were in a fishing boat out on the ocean during this storm? Why?

Alternative Activity: Bring to class a recording of *The Flying Dutchman*, and play the overture to the class. Do not tell students what the opera is about. Ask: How does this music make you feel? Why? Is it fast? slow? quiet? noisy? How would you describe it? What is the music about? Why do you think so? (If children have difficulty answering, use the picture on page 16 as a clue.) How are the music and the picture on page 16 alike? How does the picture make you feel?

8. *Analyzing.* Discuss with the class the kinds of problems a storm can cause fishers. Discuss also the protection fishers have (lifeboats, life jackets, often radios, and so on). Make sure that students understand that even if fishers are not endangered, a storm can prevent them from fishing for several days. Have children discuss the effects of weather on their own activities, as well as the hazards caused by any kind of severe weather in your area.

9. *Observing.* Have one student read aloud the first question on page 17. Then ask students to look at the pictures. Have them describe what they see.

10. *Classifying.* Have one student read aloud the second question on page 17. Record the students' responses on the chalkboard. When all responses have been recorded, make two headings on the chalkboard: "Problems Caused by Nature" and "Problems Caused by People." Ask students to tell you which of the items listed on the chalkboard you should put under each heading. *Alternative Activity:* Divide the class into small groups. Have each group list as many problems faced by fishers as they can. Then compare the lists in class.

11. *Generalizing.* Ask: Will the people of the world ever have all the fish they want? How can fish be harmed? Is it important to protect fish? Why? Have each student draw a picture showing one way people can help to protect fish.



How can a storm cause problems for fishers?



What has the storm done?
What other problems do fishers have?

Alternative Activity: Have students work as individuals or in small groups to make pictures or lists of ways of protecting fish. Then ask the class as a whole: Will the people of the world ever have all the fish they want? How can fish be harmed? Is it important to protect fish? Why?

12. *Valuing.* Ask four students to take part in a role-play. Two should play the parts of children who are throwing garbage into a lake. The other two should play the parts of children who are telling the first two not to do this. Encourage students to give reasons for the things they say in their roles.

Fish Processing

CHAPTER UNDERSTANDING Because fish processing involves technology and specialization, people of fishing communities depend on one another and on people in other communities.

CONCEPTS interdependence, needs, roles, wants

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

The Introductory Lesson may be used for diagnosis.

Activities 4 and 5 in Lesson 1; Activities 3, 4, and 6 in Lesson 2; and Activities 3, 5, and 6 in Lesson 3 are especially appropriate for evaluation.

CHAPTER UNIFYING ACTIVITIES

1. Plan field trips to different parts of your community. Such study trips will lay a foundation for the construction of a model of your community. The model may be made out of small cardboard boxes (such as match boxes), colored pieces of paper and fabric, pipe cleaners, and so on. Construction of the model may be begun during study of this chapter and carried out throughout the study of the entire book if you wish.

2. On a large piece of paper which you can display in class, keep a list of the different ways fish are processed (for example, dried, frozen, canned, and so on). The children can gain needed information from visiting grocery stores and supermarkets with their parents and from newspaper advertisements. You might also ask children to bring in empty fish and seafood containers.

INTRODUCTORY LESSON

Briefly review with students the fish and seafood they eat. Have them identify different ways fish is found in stores. (live, fresh, frozen, dried, smoked, pickled, and canned) Ask why fish and seafood are found in so many ways, and record suggestions on the chalkboard for reference during the lesson. (At this point, you may wish to begin Chapter Unifying Activity 1.)



2

Do fishers eat all the fish they catch?
What will be done with some of the fish?



How do people use fish?
Where do they go to get fish?

Lesson 1 (pages 18–19)

OBJECTIVES

Define the word *community*. *Infer* how a fishing community is different from other communities. *Observe* parts of their own community. *Infer* that fishers receive income, with which they meet needs. *Hypothesize* that fish are processed and transported from fishing communities to communities throughout the world.

LESSON UNDERSTANDING Fish are processed and moved from fishing communities to communities throughout the world.

CONCEPTS interaction, interdependence, needs, roles, wants

MATERIALS NEEDED magazine pictures showing communities

DEVELOPING THE LESSON

▲ 1. *Defining*. Write the word *community* on the chalkboard. Ask: Does anyone know what this word means? (Accept all responses at this point.) Show children magazine pictures of different communities. For each picture, ask: What are the people doing? What kinds of buildings do you see? How are people getting from place to place? Are people working together? How?

On the chalkboard, write these two headings: "Alike" and "Different." Briefly review the magazine pictures, and ask children how the pictures are alike. Write responses on the chalkboard under "Alike." Repeat the procedure for the heading "Different." Call attention to the "Alike" column. Ask the children to use the words listed to write a sentence that is true of all the pictures they saw. The sentence should read something like this: The pictures show people who live in one place and work together to meet their needs. Next, explain that the sentence tells what a community is. Write the sentence on the chalkboard by the word *community*.

2. *Inferring*. Have children review the pictures on pages 8–13. Ask: Why do we call these places fishing communities? Are all the people in these communities fishers? What other kinds of workers might there be? Why? Do we live in a fishing community? How do you know?

3. *Observing*. Use Chapter Unifying Activity 1. Visit fishing docks.

processing facilities, fresh fish stores, and an aquarium, if any of these are in your community. Then have children begin their community model by putting in their school and homes. Have them add the places you visited that relate to fishing and buying fish.

4. *Inferring.* Have students look at the pictures and take turns reading aloud the two questions on page 18. Ask the class for responses. Moving around the class in a circle, point to each student in turn. Each should give a sentence beginning, "I am a fisher. With the money I receive from selling fish, I will buy _____." Each child should mention an item that meets one of the three basic needs.

5. *Hypothesizing.* Have the children look at the pictures on page 19. Ask two students to take turns reading aloud the questions. Ask: What is happening? Do fish meet needs? How? Where are fish sold in our community? Where do you think the people who sell fish in our community get the fish? Do they catch fish themselves? Do the people in the pictures catch the fish they sell? Might they sell some of the fish they catch to people who live far from them—in other communities? Why do you think so? How might the fish get to faraway communities? Accept all responses.

Lesson 2 (pages 20–21)

OBJECTIVES

Define the word *transportation*. *Infer* the reasons why fish are refrigerated and are transported to be sold. *Analyze* why fish are processed. *Classify* steps in fishing and fish processing. *Classify* ways fish are processed. *Generalize* that processing depends on technology and that processing and technology enable fishers to sell in distant places.

LESSON UNDERSTANDING Fish can be transported to communities throughout the world because of technology.

CONCEPTS interaction, interdependence, needs, roles

MATERIALS NEEDED an assortment of magazines (optional)

DEVELOPING THE LESSON

1. *Defining.* Ask: When you and your family take a trip, how do you travel? (by car, bus, plane, and so on) How many ways can you think of that people can travel from place to place?



How are the fish being packed?

How are they being moved?



What is being done to these fish?
Why?

Now say: All these ways of moving people can also be used to move things. We call all ways of moving people and things *transportation*. Write *transportation* on the chalkboard.

2. *Inferring*. Have the students look at the pictures on page 20. Ask a student to read aloud the first question. Ask the class for responses. Then ask: Why is there ice in the top picture? What foods are in your refrigerator at home? Why is this food kept in the refrigerator? (It would spoil if it were not kept cold.) What would happen to fish that were not kept in ice?

Ask a student to read the second question. Ask: Which means of transportation would you use if you were going to move a large number of fish? Why might fishers want to have their fish moved to faraway places?

3. *Analyzing*. Have the children look at page 21. Ask one student to read aloud the questions. Have the class respond. For the picture at the left, ask: Have you ever eaten dried fruit? Why is fruit dried? What happens to fruit if it is left on the tree for a very long time? How does drying fruit solve this problem? Why do you think fish are dried? Now ask: What is being done to the fish in the other picture? Why?

4. *Classifying*. Divide the class into five groups. Ask Group 1 to draw a picture (or pictures) of fish swimming in the ocean. Ask Group 2 to draw a picture (or pictures) of people catching fish. Have Group 3 draw a picture (or pictures) of fishing boats coming to a dock. Ask Group 4 to draw a picture (or pictures) of one way of keeping fish so they can be eaten. Ask Group 5 to show fish being moved from one place to another.

Then ask the entire class to decide how to put the drawings in sequence.

5. *Classifying*. Begin Chapter Unifying Activity 2.

6. *Generalizing*. Have the class review pages 20 and 21. Ask children to identify each tool and machine they see. Have them tell how each tool or machine is used. Ask: What part do tools and machines play in keeping fish fresh? What part do tools and machines play in transporting, or moving, fish from place to place? How does this help fishers to sell their fish to people far from fishing communities?

Lesson 3 (pages 22–23)

OBJECTIVES

Hypothesize how fish are canned.
Observe pictures of canning procedures in order to test their hypothesis. *Recall* canning processes.
Predict where fish are sent after they are canned. *Infer* that the processing of fish involves job specialization.
Synthesize from information obtained throughout the lesson that specialization causes interdependence.

LESSON UNDERSTANDING To process fish, people depend on one another.

CONCEPTS interaction, interdependence, roles

MATERIALS NEEDED *People, Places, Products* Media Kit, if possible

DEVELOPING THE LESSON

1. *Hypothesizing.* Refer to the empty jars and cans and to the newspaper advertisements children have been bringing to class for Chapter Unifying Activity 2. Ask whether any of the children have seen their parents or other adults canning fruits or vegetables. Have them explain to the class how this is done. Now ask how fish might be canned. Ask whether they are cooked before they are put in the cans, how they are put in, and so on. (Accept all responses.)

2. *Observing.* Have the class look at the pictures on pages 22 and 23, one at a time. Point to the first picture, and explain that the sardines are being sorted according to size. Ask why this might be done. Point to the second picture, and explain that the sardines have been loaded onto trays. The trays are being put on a rack, which will be placed in an oven. Ask: Why do you think the fish are put in an oven? Point to the third picture, explaining that people are packing the sardines in cans. Finally, explain that the fourth picture shows people preparing the sardine cans for sealing. The machine on the left closes the cans so they are sealed tight. Ask: Why is it important to seal the cans tightly? (If the *People, Places, Products* Media Kit is available, show Frames 54–78 of the filmstrip "Fishing.")

3. *Recalling.* Read aloud to the class the two questions on page 22. Repeat these questions for each picture, making certain that the children understand what is happening.



Where are the fish now?
What will happen to them next?



What will the cans be used for?
Where will the cans be sent?

4. *Predicting.* Have two students take turns reading aloud the questions on page 23. Ask: Where do the cans of food your parents buy at the supermarket come from? How do you think they get to the store? What kinds of transportation are used?

Alternative Activity: Have students read in pairs the questions on page 23. and answer the second question by working together on a drawing that shows where the cans will be sent.

▲5. *Inferring.* Divide the class into four groups. Assign to each group one of the four pictures on pages 22 and 23. Tell each group that they are to role-play what the people are doing in the picture assigned them. Allow the children time to move chairs, desks, and tables for props and to prepare their role-plays. After each role-play is given, ask the class: What happened in the role-play? What jobs did the people have? What tools and machines were used? After all role-plays have been given, ask: Did everyone in the role-plays have the same job? What were some of the jobs? Why do you think people in a cannery have special jobs? Why doesn't each person work at each of the jobs? Write the word *specialization* on the chalkboard, and explain that this word means that people have special jobs.

6. *Synthesizing.* Ask: When people have special jobs, do they depend on one another? What would happen if after fishers caught fish, truck drivers did not move them? What would happen in the cannery if the people who close the cans did not come to work one day?

▲ *Alternative Activity:* Have each child draw a picture or write a sentence about one of the jobs on pages 18–23. Ask children to think of ways in which people who have special jobs depend on one another. Then have each student show his or her picture or read his or her sentence to the class. As each student does this, the student should pretend to be the person in the drawing and say, "I depend on, . . ." (For example, if a student has drawn a fisher, the student might say, "I depend on truck drivers to carry the fish to faraway places.") Ask students also to say who depends on them. (The student drawing a fisher may add, "Truck drivers depend on me for fish.")

People of Fishing Communities

CHAPTER UNDERSTANDING

Although people of fishing communities may have different cultures, they share the same needs.

CONCEPTS culture, interaction, needs, roles, values

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

Activity 9 in Lesson 1 and Activities 6, 7, and 8 in Lesson 2 are especially appropriate for purposes of evaluation

The Unit Review provides for formal and informal evaluation of all the material in the Fishing unit.

CHAPTER UNIFYING ACTIVITY

Set aside a wall space, and divide it into three sections. One section should be entitled "Japan"; one, "Norway"; and one, "the United States." To each section, attach these labels: "Learning," "Playing," and "Working." As children study the chapter, have them draw or cut pictures from magazines and bring in snapshots illustrating learning, play, and work in each of the cultures. As children bring in materials, help them to place their drawings and pictures under the appropriate headings on the wall space.

INTRODUCTORY LESSON

● Have children once again find Japan and Norway on the maps on page 147. Then attach small flags of Japan and Norway to appropriate places on the classroom globe.

Lesson 1 (pages 24–25)

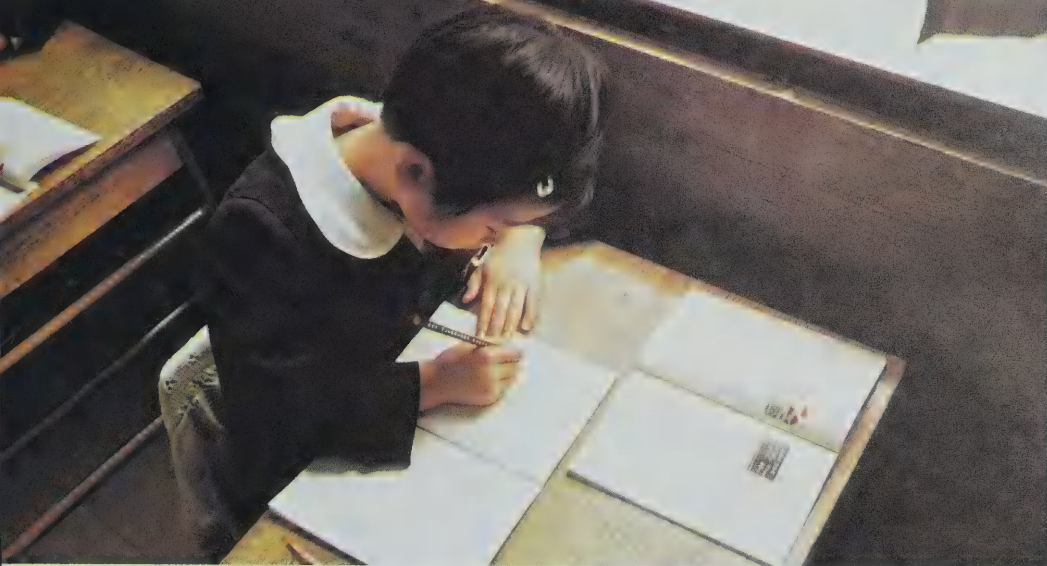
OBJECTIVES

Classify pictures according to whether they illustrate aspects of Japanese or Norwegian life. *Analyze* why Japanese and Norwegian children learn particular skills. *Classify* skills according to those learned outside school. *Compare* learning inside and outside of school. *Infer* that Norwegian and Japanese children learn the languages of their cultures.



3

What are these children learning?
What have you learned outside school?



Where are these children?
How are they learning?
Do you ever do these things?

Classify skills according to those learned in school. *Infer* what skills they themselves will need as adults. *Generalize* that Japanese and Norwegian children learn aspects of their cultures.

Valuing. Children are asked to choose a job or activity they would like when they are adults.

LESSON UNDERSTANDING Children of fishing communities learn aspects of their cultures.

CONCEPTS culture, interaction, roles, values

MATERIALS NEEDED copies of Item 1 in the Teacher's Resource Center (optional); samples of Japanese and Norwegian writing

DEVELOPING THE LESSON

1. *Classifying.* Have children review pages 8–23. For each picture, ask: Where do these people live—Japan or Norway? Ask: How can you tell?
 2. *Analyzing.* Have the class look at page 24. Ask one student to read aloud the first question. Ask the class for responses. Then ask: Why do you think children in Japan and Norway learn to do things like this? Do you learn to do this? Why not? Do you think all Japanese and Norwegian children learn to do this? Why not?
 3. *Classifying.* Ask one student to read aloud the second question on page 24. Give each child a piece of paper. Write this head on the chalkboard: "Things I Have Learned." Have children copy the head on their papers. Then write this head underneath and to the left of the main head: "Things I Have Learned Outside School." Have children copy this head on their papers and list as many things as they can under it. Either have children save their papers, or collect them and save them for Activity 6.
- Alternative Activity:* You may copy the list of words in Item 1. of Teacher's Resource Center and pass out a copy to each child. The children may then proceed as in the main activity except that they may copy or cut and paste appropriate words from the list to put under the head "Things I Have Learned at School." Lists should be saved for Activity 6.
4. *Comparing.* Ask the class to look at the pictures on page 25. Have one student read aloud the first question,

and ask for responses. Then have another student read the second question. Ask for responses. Also ask: How is the way these children are learning different from the way the children are learning on page 24? (Discuss that although children go to school primarily to learn, they also learn in less formal ways outside school.)

5. *Inferring.* Show children samples of Norwegian and Japanese writing. Pointing out the top picture on page 25, ask: What language do you think the girl in this picture is learning? Why? What language are the children in the bottom picture learning? Why do you think so? Why don't you learn to read and write Japanese? Norwegian? What language do you learn? Why?

6. *Classifying.* Have children return to the lists they made in Activity 3. Ask them to copy an additional head on their papers: "Things I Have Learned at School." Have children list what they have learned at school under this head. Again, make certain that the papers are saved.

Alternative Activity: Again, you may pass out copies of Item 1 in the Teacher's Resource Center. Have children copy or cut and paste appropriate words. Save papers.

7. *Valuing.* Have each child draw, cut from magazines, or bring to class a snapshot. The picture should show something he or she would like to do as an adult. This may be a job, a recreational activity, or so on.

8. *Inferring.* Have children share in class the drawings, pictures, or snapshots from Activity 7. Then have children circle on the lists they made in Activities 3 and 6 the skills that would help them to do what is illustrated in their drawings, and so on.

9. *Generalizing.* Have children share in class their pictures and their lists. Ask whether Japanese and Norwegian children might like to do these same things when they are adults. Ask what skills they would have to learn to do these things. Ask: Do children in Japan and Norway learn some of the same things? Why? Where do they learn these things? Do they learn different things? Why? Where do they learn these things? (At this point, you may begin the Chapter Unifying Activity.)



What are these children doing?
What games do you play?

Pictures L: girls in school gym playing a game similar to volleyball (Japan); R: boys playing soccer (Norway).



Why do people have holidays?
 What do people do on holidays?
 What holidays do we have?

Pictures T: ceremonial dance (Japan); B: children dancing in traditional costumes (Norway).

Lesson 2 (pages 26–29)

OBJECTIVES

Define the word *customs*. Compare games played by children in Japan and Norway. Classify holidays. Analyze why people celebrate particular holidays. Interpret music of Japan and Scandinavia. Infer whether particular works of art were done in Japan or in Norway. Compare Japanese, Norwegian, and American customs. Generalize that Japanese and Norwegian customs differ.

LESSON UNDERSTANDING In Japan and Norway, customs differ.

CONCEPTS culture, interaction, needs, values

MATERIALS NEEDED large calendar to hang in the classroom; recordings of Japanese and Scandinavian music; traditional clothing (if available); instruction for a dance and a game from each of the two countries—Japan and Norway (optional); Japanese and Scandinavian foods (optional); well-illustrated books on Japan and Norway (optional)

DEVELOPING THE LESSON

▲ 1. *Defining.* Ask: What do you do when you first wake up? (get up, get out of bed) Ask: Why do you sleep in a bed? Do you think everyone in the world sleeps in beds? (Discuss with children that the Japanese sleep on mats.) Next ask: What do you do after you get out of bed? Do you brush your teeth? Do you put your clothes on? Why do you wear the clothes you do? Do you wear different clothes on school days than you do on weekends? Do you wear the same clothes to parties as you do to play ball? Do you think that throughout the world everyone wears the same clothes? (Discuss the Japanese kimono, the Indian sari, the Scottish kilt, and so on.)

Now say to the class: In each country in the world, people have certain ways of doing things. These ways of doing things are called *customs*. Write the word *custom* on the chalkboard. Ask: Do we have the custom of sleeping in beds? Do we have the custom of wearing certain kinds of clothes to school? to parties? Have the class think of other customs. (shaking hands when we meet people, waving good-bye, eating our largest

meal of the day in the evening, having turkey on Thanksgiving)

2. *Comparing.* Have the children look at the pictures on page 26. Ask one student to read aloud the first question on the page. Read aloud to the class the second question, and ask for responses. Then ask: Are the games people play customs? Why? How are Japanese games like Norwegian games? How are Japanese and Norwegian games like American games?

3. *Classifying.* Have children look at the pictures on page 27. Have students take turns reading aloud the first two questions. Ask the class to respond. Ask: Are holidays customs? Why? Now read aloud to the class the third question. On the chalkboard, list the holidays identified by the class. Count the holidays, and divide the class into that number of groups, plus an additional group for birthdays. Assign each group a holiday, and have them develop a pictorial symbol to represent the holiday (perhaps a cake with candles for birthdays). Then have each group post its symbol on a large calendar hanging in the classroom. Have each child copy the symbol for birthdays and post it on his or her birth date.

To build a foundation for the development of graph skills, have children look at the birth dates on the calendar and develop a simple graph like that shown in Item 2 of the Teacher's Resource Center.

4. *Analyzing.* Choose some holidays from the calendar, and ask the class whether they think Norwegian and Japanese people celebrate these holidays. You may choose, for example, holidays such as the Fourth of July and Thanksgiving. Then ask: What holidays might people in Norway and Japan celebrate that we do not celebrate? (Add to the wall space for the Chapter Unifying Activity.)

5. *Interpreting.* Have students listen, primarily for enjoyment, to the music of Japan and the folk music of Scandinavia. If traditional clothing is available, have students try it on and tell how it affects the way they feel and/or move.

Alternative Activity: Teach the class a game or dance from each of the two countries. Have students tell which of their own games or dances they think other people might like to learn. Have



What do these pictures tell us?

What would you draw to tell people about the way you live?



How are these homes like yours?
How are they different from yours?

Pictures TL: dining area in a home (Japan); TR: washing area in a home (Japan); B: dining area in a home (Norway).

students taste Japanese and Scandinavian seafood and other foods.

6. *Inferring.* Have children look at the pictures on page 28. Ask students to describe what is happening in each picture. Ask them what feeling the picture gives them. Then ask: Which country is shown in each picture—Japan or Norway? How can you tell? What kinds of communities are shown? (fishing communities) How can you tell?

Have children work on a class picture showing their own community and their own way of life.

7. *Comparing.* Ask the class to look at the pictures on page 29. Explain that the top left picture shows a Japanese dining area. Ask: How do the Japanese eat? (They sometimes sit on the floor.) How is this different from the customs we follow when we eat? Next, point out that the top right picture shows a Japanese washing area and that the steps lead to a tub. Ask: How are Japanese and American customs of bathing different? alike? Finally, point out the Scandinavian dining area. Ask: How are Scandinavian customs of eating like ours? How are they different from ours? Are Scandinavian customs of eating more like our eating customs than they are like Japanese eating customs? What makes you think so? *Alternative Activity:* You may extend the main activity by bringing to class illustrated books showing Norwegian and Japanese life. Write on the chalkboard these three heads:

"Food," "Shelter" (or "Houses"), and "Clothing." Underneath and to the left of these heads, write "Japan" and "Norway." Have children look through the books on Japan. Call attention also to drawings, pictures, and snapshots placed on the wall space for the Chapter Unifying Activity. Ask children to find customs illustrating food, shelter, and clothing. As students respond, list customs in the appropriate places on the chalkboard. Repeat this procedure for Norway.

8. *Generalizing.* Have children complete the Chapter Unifying Activity. Then ask: Do Norwegians and Japanese have some of the same customs? Are some of their customs different? How can you tell? How are some of these customs different from our customs?

Unit Review (pages 30–31)

OBJECTIVES

Recall terms and understandings dealt with in the unit. Analyze their own community to add objects to their community model. Generalize that people in fishing communities have different ways of life but meet their needs by depending on technology, on one another, and on people in other communities.

UNIT UNDERSTANDING Although people of fishing communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

CONCEPTS culture, environment, interdependence, needs, roles

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

MATERIALS NEEDED copies of Item 3 in the Teacher's Resource Center

REVIEWING THE LESSONS

●1. *Recalling.* Copy and pass out to each child Item 3 in the Teacher's Resource Center. Have children work in pairs to draw lines that match the words with the pictures. While most of the class is working at this, take four or five students to one part of the classroom, and review with them pages 30 and 31. Rotate the children so that everyone has a chance to work on the matching exercise in Item 3 and on reviewing the pages in the book. The following are suggested questions for pages 30–31.

Page 30, top. Have children look at the picture. Ask two students to take turns reading the questions. Have the class respond. Say: What do we call things that are useful to people—that help people to meet their needs? What are *resources*? Ask first for examples of natural resources and then for examples of resources made by people.

Page 30, bottom. Ask students to describe what is happening in the pictures. Then have one student read aloud the question. Have students



Why do people need fish?

What other things do we get from the sea?



What do people use to catch fish?

Review



Why are these things being done?
What can be done with the fish now?



How are people in these two countries alike?
How are they different?

Pictures TL: sardine cans being prepared for sealing—sealing machine is at the left (Norway); TR: fish being dried (Norway); BL: children dancing in traditional costumes (Norway); BR: ceremonial dance (Japan).

name various tools that are used in catching fish. Then ask: What is done to the fish after they are caught? Are tools used for this? What tools?

Page 31, top. Have students look at the pictures. Then ask two students to take turns reading aloud the questions. Ask where the fish might be sent. Ask what means of *transportation* might be used. Have students take turns locating a place on the globe and calling on another student to suggest routes and means of transportation between your community and that place. Have children speculate about the amount of time required for the journey from their homes to the home of someone in that place.

Page 31, bottom. Have children look at the pictures. Ask: What are the people doing? Have children name some holidays celebrated in the United States. Then ask them to read the questions underneath the pictures. What do we call the things people do each day, such as shaking hands and sleeping in beds? What *customs* do we have? Have each child take a turn, repeating these words "I have the custom of _____" and filling in some custom.

2. *Analyzing.* Have children add to the model of their community begun in the second chapter, Fish Processing. Also begin to introduce the understanding that in communities people share common facilities and services. You may do this by having students add to the model facilities owned by the people of the community as a whole (schools, roads, parks, fire station, and so on).
3. *Generalizing.* Again, have children quickly review the pages in the Fishing unit. Ask: How are the people in these communities different from one another? (clothes, food, holidays—that is, customs) What is the same about the people? What do they *need*? (Have children point out pictures that illustrate people meeting needs.) How do people in fishing communities meet their needs? Do they use tools? How? Do they have special jobs? Why? What are some of these jobs? How do people with these jobs depend on one another? What other jobs do people in fishing communities have? What do people in fishing communities get from other communities? What do we get from fishing communities?

Grain-Farming Communities

OVERVIEW

This unit treats two communities—one in Thailand, and the other in the United States. Grain Farming, the first chapter, emphasizes the natural resources and technology involved in growing rice in Thailand and wheat in the United States. The second chapter, Grain Processing, explores technology and specialization and their effects on interdependence. Finally, People of Grain-Farming Communities examines the cultures of people in American and Thai grain-farming communities.

UNIT UNDERSTANDING Although people of grain-farming communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

MAIN CONCEPTS culture, environment, interdependence, needs, roles

RELATED CONCEPTS interaction, time, values, wants

SKILLS DEVELOPMENT

Children further develop map skills by finding the location of countries and of grain-farming areas. They also begin to work with the concept of distance.

Reading readiness, vocabulary development, and other language skills are provided for by numerous activities involving word usage and oral and written expression.

See Skills Symbols at the beginning of each chapter.

Grain Farming

CHAPTER UNDERSTANDING Because of technology, people in grain-farming communities can make use of their natural resources to meet needs.

CONCEPTS environment, needs, values

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.



Grain-Farming Communities

Picture family eating rice at meal (Thailand).



EVALUATION STRATEGIES

The Introductory Lesson provides opportunity for evaluating learnings in the previous unit and for diagnosing children's knowledge of farming.

Activities 1, 2, 8, 10, and 11 in Lesson 1; Activities 5, 7, and 10 in Lesson 2; and Activities 2, 5, and 7 in Lesson 3 are especially appropriate for purposes of evaluation.

CHAPTER UNIFYING ACTIVITIES

1. Ask the class what plants need in order to grow. Record responses on the chalkboard. Then explain that the class is going to engage in an experiment. Provide a large number of the same type of seed, or the pits of the same type of citrus fruit (orange, lemon, or grapefruit). Also provide containers (perhaps milk cartons), soil, and some sand. Divide the class into five groups. Have each group plant the same number of seeds in containers that have sand and good soil. Add liquid plant food (chemical fertilizer) to the soil. Group 1 should immediately put their containers in a refrigerator. Group 2 should water their plants as frequently as necessary to keep the soil damp. Group 3 should water their plants once a week. Groups 2 and 3 should give their plants sunlight. Group 4 should water as frequently as Group 2 but give their plants only artificial light. Group 5 should keep their seeds in a dark place. Each group should make and record observations weekly.

2. Have students, working in pairs or in small groups, cut from construction paper a house that is about 10 inches high. Have them also cut the figure of a child about 4 inches high. Next, ask them to cut long strips of tan or green construction paper 5 inches wide. (You may want to draw lines on the paper so they may cut along them.) See that each strip is folded along its length; the fold should be about one and one-half inches deep. Have children use scissors to make narrow, fringe-like cuts along the unfolded length of each strip. Then ask them to paste down each folded end. Finally, have them paste together all folded ends side by side, overlapping the folds closely. The completed strips should resemble a wheat or rice field. Have each pair or group of students place the child and house in the diorama.

INTRODUCTORY LESSON

Ask the class to look at the picture on page 32. Ask: What are the people doing? What do you think they are eating? Do we eat rice? (Have children identify rice products.) Where might these people live? Do you think they live in our country? Why or why not? Can you tell what some of their customs are? What do they do when they eat? How are they dressed?

Now have children look at the picture on page 33. Ask: What is happening in this picture? What is the machine called? (a tractor) What are tractors used for? Might this man be a farmer? Why do you think so?

Explain that the man on the right grows wheat. If students have never seen actual wheat and rice plants, try to obtain samples for the class to examine. If samples are unavailable, draw a simple sketch of each type of plant (about three feet high) on the chart paper. Throughout the unit, use the drawings for reference.

If the *People, Places, Products* Media Kit is available, display the study print for "Grain Farming."

Ask: Why do you think people grow rice? wheat? Display empty containers of cereals, rice, cake mixes, pancake mixes, spaghetti, cake or pie, bread, and other foods made from wheat and rice. Have students identify each and tell what it is made of. Explain that rice grains and wheat flour come from the seeds of rice and wheat plants. (Keep the containers on display.)

Lesson 1 (pages 34–37)

OBJECTIVES

Classify foods into those grown on farms. *Observe* farms in their community or farms in pictures.

Observe the location of Thailand and the United States. *Hypothesize* what resources plants need in order to live. *Analyze* the sequence of steps in the planting of rice. *Interpret* what rice farming work is like. *Infer* at what times of year wheat is planted.

Contrast wheat plants to rice plants.

Synthesize information to make a diorama of a rice or wheat farm.

Synthesize information to determine what natural resources are found in wheat- and rice-growing regions.

Generalize that people of grain-farming communities use their natural resources to meet needs.



1

What kind of land do you see?
How are people using the land?



Rice and wheat are growing here.
What do all plants need in order to grow?

LESSON UNDERSTANDING People of grain-farming communities make use of their natural resources to meet needs.

CONCEPTS environment, needs, roles

MATERIALS NEEDED small cutouts of Thailand and the United States; a collection of magazine pictures—some showing farms, farmlands, and crops (optional)

DEVELOPING THE LESSON

1. *Classifying.* Have students look at the pictures on page 34. Ask them to identify everything they see in each picture. Then have two students take turns reading the questions. Ask: Why do we have farms? What did you have for dinner last night? for breakfast today? Which of these foods were grown on farms or were made from things grown on farms? What kind of land do you see around the farms in the pictures? Why is flat land best for growing plants?

2. *Observing.* If there are farms on which crops are raised in your area, plan a class field trip to one of them. Take photographs, and tape record interviews and sounds of farm equipment. Then have students add crop farms to the community model begun in the previous unit.

● 3. *Observing.* Explain to the children that the farms in the picture at the left are in Thailand. Write "Thailand" on the chalkboard. Help students to locate Thailand on the maps on pages 147 and 148 of the student Resource Center. Have one student tape a small cutout of Thailand over that country on the classroom globe.

Next, explain that the farms in the picture at the right are in the United States. Help students to locate the United States on the map on page 146. Have one student tape a small cutout of the United States over that country on the classroom globe. Point out wheat-growing states, which are in the midwestern United States.

4. *Hypothesizing.* Have students look at the pictures on page 35. Read to them the first sentence on the page. Have one child read the second sentence on page 35, and then begin Chapter Unifying Activity 1.

Alternative Activity: Have one child read the second sentence on page 35. Ask for responses. If children have difficulty responding, have them

remember experiences their families have had with house plants, outdoor plants, or gardens. Write the correct responses on the chalkboard

(sunlight, soil, water, perhaps nutrients—or food). Taking one response at a time, ask: What might happen to a plant that did not have this?

5. *Analyzing.* Have children look at the top left picture on page 36. Have children explain or explain to them why soil is plowed before crops are planted. (Plowing aerates soil, softens it for new plants, and kills weeds.) Now have one student read the sentences at the bottom of the page. Ask the class for responses.

Call students' attention to the top right picture on page 36. Explain that because rice plants grow in water, the field has been flooded. Ask: What is the woman doing? How does this help to keep the water in one place?

Have students look at the bottom left picture. Ask the children to describe what the people are doing. Explain that the man and woman in the background are using a log to smooth the field, which was flooded and has now been partially drained. Ask: Why do you think the people want to make the field smooth? Explain that the woman in the foreground is planting the rice seeds, which she is picking out of the baskets covered with palm leaves.

For the final picture on the page, tell the children that the woman is transplanting the rice shoots to another area. Rice seedlings are grown close together, but young plants need room in which to grow.

6. *Interpreting.* Have the students look again, briefly, at the pictures on page 36. For each picture, ask: What is this work like? Is it easy? hard? Why do you think people do this kind of work? What do people get for working at jobs? How would our lives be different if people did not do this kind of work?

Alternative Activity: Have students interpret the actions involved in rice farming work in the form of dramatic rhythms. Some students may wish to make up a song or chant to accompany the rhythms.

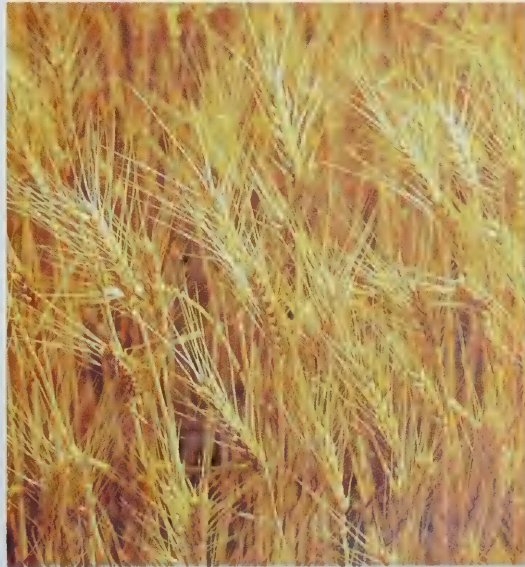
■ 7. *Inferring.* Have students look at the pictures on page 37. Ask one student to read the first question. Ask the class for responses.

On the chalkboard, write the months of the year in sequence. Then using



These people are growing rice.
How does the animal help?

Pictures TL: woman using water buffalo to plow rice field—the field is then flooded for planting (Thailand); *TR:* woman building dikes in flooded rice field in preparation for planting (Thailand); *BL:* the woman in the foreground is planting rice seeds by hand while the couple in the background are smoothing the flooded field with a log (Thailand); *BR:* woman transplanting rice shoots by hand (Thailand).



What do these pictures show?
How are wheat plants different from
rice plants?

tagboard or sturdy paper, construct a timeline, labeling each month in the year. Discuss the first picture, asking what is happening to the wheat. When you elicit that in the top left picture, the wheat seed is beginning to grow, write that on the timeline by the word "November." Proceed in this manner for each picture on the page, writing "young wheat" for "March," "wheat plants" for "April," and "ripe wheat" for "June." Ask: What do you think happens when the wheat is ripe?

Now ask: What would an American wheat farmer do in September and October? (plant wheat) Ask students about their activities during these months. Following the stages of wheat growth on page 37, have students compare their activities at each stage with those of American wheat farmers.

On the same timeline, use different colored pencils to show the rice-growing sequence: plowing and planting in late April and early May, transplanting to larger paddies in late June, draining paddies in late September, obtaining ripe plants in October.

8. *Contrasting.* Have one student read the second question on page 37. To help children answer, refer them to the stalks you brought in or the pictures you drew for the Introductory Lesson.

9. *Synthesizing.* Begin Chapter Unifying Activity 2.

●10. *Synthesizing.* Review with the class the term *natural resources*. Ask students to recall why fish are called a natural resource. Then discuss what *soil* is. Ask: Is soil a natural resource? Why do you think so? How do people use soil? How would our world be different if there were no soil? Ask children to review the pictures on page 36. Ask: What natural resource besides soil is shown here? (water) How is water a natural resource?

Have children look at the bottom map on page 148. Ask children to find wheat-growing areas. Ask them to find rice-growing areas. Then point to one of these areas on the map. Ask: What natural resources are found here? How do you know?

11. *Generalizing.* Why do people grow rice and wheat? How are they useful? What needs do they meet? What natural resources do people need to grow these crops?

Lesson 2 (pages 38–39)

OBJECTIVES

Classify insects as a problem to farmers. Classify plant diseases as a problem. Classify weeds as a problem. Classify bad weather and fire as problems. Infer how insects destroy crops. Interpret how farmers feel when their crops are destroyed. Analyze why plants are important. Infer why farmers use scarecrows. Infer why crop dusting is done. Generalize that wheat and rice plants are resources which must be protected.

LESSON UNDERSTANDING Wheat and rice plants are important resources which must be protected.

CONCEPTS environment, interdependence, needs, values

MATERIAL NEEDED magazines with pictures of crops and hazards to crops (optional)

DEVELOPING THE LESSON

1. *Classifying.* Write two heads on the chalkboard: "Farmer's Problems" and "Things That Help Farmers." Then ask: What are insects? How can insects harm plants? Write "insects" under the "Problems" head on the chalkboard. Explain that some birds eat grain and young rice plants, although many birds are helpful because they eat insects. Write "some birds" under the "Problems" head, and "some birds" under "Help."

2. *Classifying.* Ask: Have you ever become sick? What is a *disease*? Have students identify some of the diseases they have had. Then explain that plants also get diseases. Write "diseases" under the "Problems" head. Discuss that scientists try to develop plants that will not become diseased. Write "strong plants" across from "diseases" and under the head "Things That Help Farmers."

3. *Classifying.* Ask: What do we call plants that grow where they are not wanted? Have you ever pulled *weeds*? Ask: What might weeds take away from plants? (food—that is, soil nutrients, water, sunlight) Write "weeds" under the "Problems" head.

4. *Classifying.* Ask: What problems might rainy weather cause for wheat and rice farmers? What would happen if no rain fell for a long time? Write "too much rain" and "too little rain" under the "Problems" head.



What can harm plants?
Why do people need plants?

Pictures TL: swarm of locusts destroying plants (Africa); TR: desert locust (Africa); B: diseased and healthy wheat—the diseased wheat is infected with brown loose smut (U.S.).



How does the scarecrow help the farmer?
How does the plane help the farmer?

5. *Inferring.* Have one student read the first question on page 38. Ask students to look at the pictures on the page. Point to the list you have made on the chalkboard. Ask: Which of these problems is shown in the pictures? Have children try to identify the insect in the top right picture as a grasshopper. Explain that the plant in the bottom picture is diseased.

6. *Interpreting.* Divide the class into small groups. Tell each group of children that they are to pretend to be wheat farmers whose crops have been destroyed in the ways shown in the pictures. They are to prepare a skit showing how they feel.

Alternative Activity: Have children draw pictures showing how they would feel if they were wheat farmers whose crops had been destroyed in the ways shown in the pictures.

7. *Analyzing.* Ask one student to read aloud the second question on page 38. Now ask why people want to help wheat and rice farmers solve the problems listed on the chalkboard.

8. *Inferring.* Have students look at the top picture on page 39. Have one student read aloud the first question. Point to the list of "Problems" you have made on the chalkboard. Ask: Which of these problems does the scarecrow help to solve? Write "scarecrow" across from "birds" under the head "Things That Help Farmers."

9. *Inferring.* Have students look at the bottom picture on page 39. Have one student read the question aloud. Ask: What is being sprayed from the plane? Write this answer across from "insects" on your list. Have students recall that insect poison can kill fish if it gets into rivers and oceans. Ask: What might insect poison do to birds? Why don't we want to harm birds?

10. *Generalizing.* Review with the class the list you have made on the chalkboard. Pointing to the "Problems" list, ask: Why is each of these a problem? Why is it important for people to grow wheat and rice plants? How would your lives be different if farmers could not grow these plants?

Alternative Activity: Have children work in small groups. Assign each group one of the problems listed on the chalkboard. Each group is to draw or cut pictures that illustrate that problem. Then ask the questions appearing in the main activity.

Lesson 3 (pages 40–41)

OBJECTIVES

Observe pictures of farmers in the past. Classify tools and machines used by farmers in the past. Compare ways in which farmers use animals. Interpret pictures to decide whether farming is easier and more efficient than it was in the past. Compare farm machines and tools used in different communities. Analyze latest developments in farm equipment. Generalize that wheat and rice farmers make use of technology.

LESSON UNDERSTANDING Wheat and rice farming depend on technology.

CONCEPTS change, environment, roles, time, values

DEVELOPING THE LESSON

1. *Observing.* Have students look at the pictures on page 40. Ask one student to read aloud the first question. Discuss with the students that the farmer in the top picture is using a plow, and the farmer in the bottom picture is sowing oats—scattering them so they will grow.

2. *Classifying.* Review with children the word *tools*. Ask them to recall some of the tools and machines used by fishers. Have students look once again at page 40. Ask: What tools did these farmers use? Why did they use them?

Alternative Activity: Write the word *tools* on the chalkboard. Have children work in small groups to review the previous unit. Ask them to select tools and machines used in fishing. Ask each group to draw pictures of these tools and machines. Set aside a wall space, collect the pictures, and attach them on the wall space under the label "Fishing Tools." Now have students look once again at page 40. Ask: What tools are these farmers using? Why did they use them?

3. *Comparing.* Have one student read aloud the second question on page 40. Direct the children's attention to the top picture. Then ask them to compare this picture with that of the water buffalo on page 36. Ask: Are animals being used in the same way? How? What other animals have been used to pull plows and wagons? (horses, mules, oxen, and so on)

4. *Interpreting.* Have students look at the top picture on page 41. Explain that the picture shows land being



What are these farmers doing?
How are the horses helping?



How is farming today different from farming
long ago?
What things are the same?

plowed. Ask one student to read aloud the first question. Ask: How is this way of plowing different from the way the man is plowing on page 40? Which way is faster? Why do you think so? Which is easier for the farmer? Which tool or machine is easier to use? Why do you think so?

Use the same kinds of questions for the bottom picture on the page.

5. *Comparing.* Have one student read aloud the second question on page 41. Ask the class for responses. Have students review pages 36–39 to find tools used in farming. Ask: Why is each tool used? How are the tools alike? Different?

Alternative Activity: Have one student read aloud the second question on page 41. Ask the class for responses. Then have students work in small groups to review pages 36–39. Ask them to find tools and machines used in wheat and rice farming. Have groups draw pictures of these tools and machines, and of the tools and machines on pages 40 and 41. Attach the drawings to a wall under the label "Wheat and Rice Farming." Pointing to the drawings, ask: How are these tools alike? Different?

6. *Analyzing.* Invite to your class a farmer, botanist, or perhaps your local grocer. Or show a film on wheat-farming activities. Before the visitor arrives, have students work in small groups to think of questions they may want to ask about the latest kinds of machinery used in farming. As groups think of questions, record them on a piece of paper.

▲ *Alternative Activity:* Have children work in small groups and look through library books and magazines to find farm machinery. Have the groups write short sentences describing the use of each machine or tool.

7. *Generalizing.* Ask: What tools and machines did wheat and rice farmers use long ago? Why? What tools and machines do wheat and rice farmers use today? Why?

Grain Processing

CHAPTER UNDERSTANDING Because grain processing involves technology and specialization, people of grain-farming communities depend on one another and on people in other communities.

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

CONCEPTS interaction, interdependence, needs, roles, time

EVALUATION STRATEGIES

The Introductory Lesson provides both for evaluation of previous learning and for diagnosis.

Activities 5 and 6 in Lesson 1; Activities 3, 4, 5, and 6 in Lesson 2; Activities 2, 4, 6, 7, 8, and 9 in Lesson 3; and Activities 2, 3, 5, 6, and 7 in Lesson 4 are especially appropriate for purposes of evaluation.

CHAPTER UNIFYING ACTIVITIES

1. Begin a class recipe book by asking children to bring from home simple recipes made from wheat and rice products (and perhaps fish).

You may also correlate this activity to a study of the four basic food groups: milk and dairy products; meat, fish, and poultry; bread, pasta, and cereals; and fruit and vegetables. Divide the class into four groups, and assign to each group one of these categories of foods. Ask each group to draw or cut from magazines pictures that illustrate the category assigned. Hang the pictures on the wall, with appropriate labels. Students may plan meals by choosing recipes from the book and referring to the chart of the four food groups.

2. Have students cut and label pictures from magazines to make booklets of wheat and rice products.

INTRODUCTORY LESSON

Say: What have we learned about the way rice and wheat are planted? about the way wheat and rice plants grow? Then ask: What do you think happens when wheat and rice plants are ripe? How do you think this is done? (Accept all responses.)



2

Machines cut and clean the wheat.
What do you think will happen next?



The ripe wheat is stored in tall buildings.
Next the wheat will be taken to a mill, where
it will be ground into flour.

Lesson 1 (pages 42–43)

OBJECTIVES

Observe pictures of wheat being cut. Hypothesize what might happen to wheat after the kernels are separated from the chaff. Analyze why grain is stored in elevators. Infer that a few grain elevators serve many communities. Analyze why particular means of transportation are used to move grain to mills and how wheat is ground into flour. Generalize that people make use of technology to transport wheat.

LESSON UNDERSTANDING People make use of technology to harvest and transport wheat so that it may be processed.

CONCEPTS interaction, interdependence, needs, values

MATERIALS NEEDED: People, Places, Products Media Kit (if available); wheat flour

DEVELOPING THE LESSON

1. **Observing.** Have the students look at page 42. Read aloud to the class the first sentence. Ask: What is happening in the top picture? (The wheat is being cut.)
 2. **Hypothesizing.** Ask students to look at the bottom picture on page 42. Explain that the combine is cleaning the wheat by separating the wheat kernels from the chaff. The kernels are pouring into the truck, while the chaff is flowing out of the back of the combine. Have one student read the second sentence on the page. Ask the class for responses.
 3. **Analyzing.** Have the class look at the top picture on page 43. Ask one student to read aloud the first sentence. Have students look carefully at the buildings. Ask: Have you ever ridden in an elevator? Where was the elevator? Why did you ride in it? Now explain that the tall buildings in the picture are called *grain elevators*. Ask: Why do you think these buildings are called elevators? How are they like the elevators people ride? How are they different? Why do you think grain is stored in elevators rather than in another kind of building—a low, flat one, for example?
- Alternative Activity:** If you have access to the People, Places, Products Media Kit, begin to show the "Grain Farming" filmstrip to the class.

4. *Inferring.* Ask: Do you think each small grain-farming community has grain elevators? Why might one set of elevators serve many farm communities? How might the grain get from farms to the grain elevators? What means of transportation might be used?

Draw a flow chart on chart paper to show a wheat farm, a truck going to grain elevators, and a train going to a mill. Refer to the picture on page 46 to point out what a mill is. Keep the chart and complete it (by adding a bakery, a dinner table, and so on) in later lessons.

5. *Analyzing.* Have a student read the second sentence on page 43. Ask: How might the grain be moved to the mill? What means of transportation might be used? Why do you think so? Have children check their responses by looking at the pictures on the page. Ask: Is this a good way of moving grain? Why?

Now ask: Why is wheat ground into flour? What does flour look like? Show samples of wheat flour to the class.

6. *Generalizing.* Ask: Why is wheat taken to grain elevators after it is cut? Why is it taken to a mill? What kinds of transportation are used to move wheat? Imagine that people could move wheat only by carrying it in their arms or by putting it in wagons drawn by horses. Would you have many things made of wheat? Why do you think so?

Lesson 2 (pages 44–45)

OBJECTIVES

Hypothesize whether wheat might be cleaned in different ways. *Infer* that people in different areas use different kinds of technology to clean wheat. *Synthesize* information to understand why rice is grown primarily in one part of the world. *Analyze* why rice is dried. *Hypothesize* whether the drying of rice might be done differently in different places. *Generalize* that in different situations and/or areas of the world people use different kinds of technology to process grains.

LESSON UNDERSTANDING People of grain-farming communities use different kinds of technology.

CONCEPTS culture, environment, interaction

MATERIALS NEEDED classroom globe



These people are cleaning wheat.
How else could this be done?



These people are drying rice.
What other foods are dried?

DEVELOPING THE LESSON

1. *Hypothesizing.* Ask: What is done to wheat after it is cut? Ask students to refer back to page 42 and point out the picture that shows wheat being cleaned. Now ask: Might there be another way of doing this? Do you think people have always had machines like the one on page 42? (Accept all responses at this point.)

2. *Inferring.* Have students look at the picture on page 44. Ask: What do you see? What tools are the people using? Now have two students take turns reading aloud the sentences. Ask: How is this way of cleaning wheat different from the way the machine on page 42 cleans wheat? Which way do you think is easier? Why? Which is faster? Why?

● 3. *Synthesizing.* Have students look at the picture on page 45. Ask: Do you think this picture shows people in our country? Why do you think so? Point out the People's Republic of China on the classroom globe. Then have students recall where Thailand is. Have a volunteer find this country on the classroom globe. Ask: Are these two countries near each other? How can you tell? Are they both far from the United States? How can you tell? Now ask: Why might rice-growing countries be near one another? Again, have children locate rice-growing areas on the map on page 148.

4. *Analyzing.* Read to the class the first sentence on page 45. Ask: Why do you think rice must be dried? What would happen if rice were stored when it was very wet? (It would spoil.) Have a student read aloud the second sentence. Ask: Why are fish dried?

5. *Hypothesizing.* Ask: Are the people in the picture using tools? large machines? Might there be other ways of drying rice? Why do you think so? Might machines be used?

▲ *Alternative Activity:* Arrange for the class to visit the school library to find books showing various ways of processing rice.

6. *Generalizing.* Have students briefly review pages 42–45. Ask: Do people in different parts of the world do some of the same things? What are these things? Do people do the same things in the same way? What do the pictures tell you? Are people using different tools? How do the tools differ? Which tools do work faster? easier? How can you tell?

Lesson 3 (pages 46–47)

OBJECTIVES

Observe a picture of someone using a mortar and pestle to grind wheat into flour. Compare methods of grinding wheat. Infer that today wheat is ground into flour by machines powered by electricity. Synthesize information to understand that modern technology enables people to grind wheat easily and quickly. Observe bakery goods produced from wheat. Recall how people make dough. Interpret wheat processing through role-play. Generalize that workers involved in wheat processing are interdependent. Generalize that wheat farmers and city-dwellers are interdependent.

LESSON UNDERSTANDING People of wheat-processing communities depend on one another and on people in other communities.

CONCEPTS interdependence, needs, roles, time

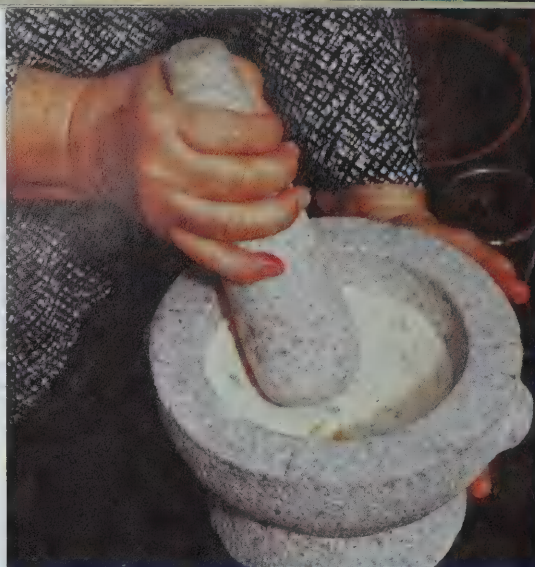
MATERIALS NEEDED a box of cookies

DEVELOPING THE LESSON

1. *Observing.* Ask the class to recall that wheat is ground into flour. Then point out the top left picture on page 46. Ask: What are these tools? (You may want to refer to the mortar and pestle as a bowl and grinder.) Have one student read the first sentence. Ask: What does "by hand" mean? What does the picture tell you?

2. *Comparing.* Have students look at the top right picture on page 46. Ask: Does anyone know what this is called? (a water wheel) Explain that the wheel was in a mill. Wheat kernels were placed between two large circular mill stones. The stones, turned by human, animal, wind, or water power, crushed and ground the whole wheat kernel without removing the bran coat. Ask: Which way of grinding wheat is faster—using a bowl and grinder or a water wheel? Why? Which way is easier? Why do you think so?

3. *Inferring.* Have one student read aloud the first question on page 46, and direct the children's attention to the bottom picture. Explain that this machine is grinding flour. Ask: What made the wheel in the other picture turn? What do you think makes the machine in the bottom picture work? If the children do not say *electricity*, turn



Long ago, wheat was ground into flour by hand.

How is it usually ground today? Why?



What has happened to the wheat?
How do farmers help people in cities?
How do people in cities help farmers?

the classroom lights on and off. Ask: What makes the lights turn on? Have children name tools and machines in their homes that are run by electricity.

4. *Synthesizing.* Point out again the bottom picture. Ask: Why is wheat often ground this way today?

5. *Observing.* Have students look at the four pictures on page 47. Ask one student to read aloud the first question. Ask for responses.

6. *Recalling.* Point to the top left picture on page 47. Elicit from students that the farmer is loading grain. Ask students to tell what happens to grain after this. (It is ground into flour.) Have students add a little water to some wheat flour and permit them to touch the dough to feel its texture. Explain that in bakeries large amounts of flour are placed in machines that turn the flour into dough. (You may wish to begin Chapter Unifying Activity 1 now.)

7. *Interpreting.* Set a box of cookies somewhere in the classroom. Ask students to name jobs involved in raising wheat and turning it into cookies. When necessary, help students to think of jobs not shown in the pictures (various factory workers, truck drivers, bakers, and so on).

Have each student choose a job that he or she wants to role-play. Have students role-playing the same job gather together in one area. Then ask each group to give their role-plays in class. (Role-plays should be given in sequence.) After the role-plays end, you may pass out a cookie to each student. Ask each to explain why his or her job was important, what skills he or she needed to know, and how his or her job was different from the jobs of other workers.

8. *Generalizing.* Ask: In turning wheat into foods, do people have special jobs? How do you know? Then ask: How do different workers depend on one another? Have students explain what would happen if one kind of worker no longer did his or her job. Ask: Do workers need tools and machines? What kinds? Why?

9. *Generalizing.* Have one student read the remaining two questions on page 47. Ask: What bakery goods would we have if there were no farmers? Why can't wheat be grown in cities? Ask: What do farmers get from cities? Why are goods baked in cities instead of on farms?

Lesson 4 (pages 48–49)

OBJECTIVES

Compare two methods of harvesting rice. Observe pictures showing the threshing of rice and the separation of rice from stalks. Infer how rice is made into flour. Observe pictures of people eating rice foods. Interpret rice growing and processing through role-play. Generalize that workers involved in rice processing are interdependent. Generalize that farmers and city-dwellers are interdependent. Interpret grain processing by creating a story. Synthesize information to place (or locate) wholesale and retail bakeries on the community model.

LESSON UNDERSTANDING People of rice-processing communities depend on one another and on people in other communities.

CONCEPTS interdependence, needs, roles

MATERIALS NEEDED rice flour

DEVELOPING THE LESSON

1. *Comparing.* Have students look at the top picture on page 48. Read to the class the first question on the page. Ask: What does *harvest* mean? If children do not know the meaning of the word, explain it to them. Have children look at the pictures at the bottom. Then ask: How is the way rice is being harvested different in these two pictures? Which way is easier? faster? Why do you think so?

Read aloud to the class the second question on the page. Before children answer, call attention to the natural environment shown in the pictures. Also ask: Do you think large machines are expensive? Why? Why might some farmers not be able to buy such machines?

2. *Observing.* Have students look at the two pictures at the top of page 49. Explain that in the top left picture, rice is being threshed with a tractor. In this process, the machine is run over the rice stalks, separating some of the rice from the stalks. The rice is then swept to one side, and the stalks and rice are run through a machine for further refining. Explain that the top right picture shows people feeding this machine by hand. The cleaned rice pours out of the bottom front of the machine, and the chaff exits through the back. Ask: How is this way of



How is rice harvested?

Why can't machines be used in some places?



What happens to the rice before people eat it?

What foods are made from rice?

separating rice from stalks like the way wheat kernels are separated from the chaff?

3. *Inferring.* Ask one student to read the first question on page 49. Have students review what is happening in the top pictures. Then show the children rice flour. Ask: How is rice flour like wheat flour? How is it different? How do you think rice might be made into flour? How was wheat made into flour? Discuss that kernels of rice are cooked or are ground up to make rice flour.

4. *Observing.* Have one student read the second question on page 49. Ask the class to look at the bottom pictures. Ask: What do you see in each picture? (If you have not begun Chapter Unifying Activity 2, you may wish to begin it at this point.)

5. *Interpreting.* Repeat Activity 7 in Lesson 3. This time, however, have children role-play, in sequence, the jobs involved in growing and processing rice. After the role-plays end, ask each student to explain why his or her job was important, what it felt like to do the work, what skills he or she needed to know, and how his or her job was different from the jobs of other workers.

6. *Generalizing.* Review once again with children the word *specialization*. Ask: Do people have special jobs in growing rice and turning it into a food? How can you tell? How do different workers depend on one another? Have students give specific examples. Do workers need tools to produce rice? Have students point out tools and machines shown in the pictures.

7. *Generalizing.* Now ask: Do people in cities depend on people in rice-growing communities? How? Why can't rice be grown in cities? Do people who grow rice depend on people in cities? How?

▲8. *Interpreting.* Read or tell children the story of *The Gingerbread Man*. Ask children to volunteer to write or make up and tell an original story about the adventure of some other grain product. Or students may take turns completing a sentence beginning, "If I were a (noodle, bagel, fruitcake), I would _____."

▲9. *Synthesizing.* Locate wholesale and retail bakeries on the community model.

Pictures TL: small vehicle threshing rice (Thailand); TR: automatic rice thresher which further separates rice from chaff (Thailand); BL: children eating rice (Japan); BR: boy pouring brown rice into measuring cup (U.S.).

People of Grain-Farming Communities

CHAPTER UNDERSTANDING

Although people of grain-farming communities may have different cultures, they share the same basic needs.

CONCEPTS culture, interdependence, needs, values

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

The Introductory Lesson provides for evaluation of previous learning and gives children an opportunity to form a hypothesis which they may test throughout the chapter.

Activities 1, 3, 6, 10, 15, 16, and 17 in Lesson 1; Activities 3, 6, 7, 10, and 11 in Lesson 2; and Activities 5 and 6 in Lesson 3 are especially appropriate for purposes of evaluation.

CHAPTER UNIFYING ACTIVITY

Make copies for the entire class of Item 4 in the Teacher's Resource Center. The classification exercise which depends on this item is carried on throughout the entire chapter.

INTRODUCTORY LESSON

Ask: Do you remember the people who grow wheat? Where do they live? Where do the people who grow rice live? (If children cannot respond, tell them they will soon find out.) Then ask: Do you think people who live in wheat-growing areas eat the same kinds of food, wear the same kinds of clothes, and play the same kinds of games? What might be the same? What might be different?

Lesson 1 (pages 50-53)

OBJECTIVES

Recall the location of Thailand.

Analyze why people in different parts of the world eat different foods.

Classify foods according to the areas in which they are eaten, *Inter* which countries are shown in photographs.

Interpret pictures of recreational activities in Thai and American grain-farming communities. *Contrast*



3

What foods are these people eating?
What plants do people use for food?



What are these people doing?
How are they like you?
How are they different?

Pictures T: farm children riding water buffalo (Thailand); B: farm family having a picnic (U.S.).

Thai and American customs. *Interpret* a picture of Thais flying a kite. *Interpret* a picture of Thais riding a Ferris wheel. *Interpret* a picture of Thai children swimming. *Classify* activities according to whether they are recreational and according to where they are done. *Infer* the kind of community shown in photographs. *Contrast* recreation in American wheat-farming communities with recreation in Thailand and in other communities in the United States. *Compare* recreation in Thai and American communities. *Contrast* recreation in American wheat-farming communities with recreation in other parts of the United States and in Thailand. *Classify* recreation in Thai and American grain-farming communities. *Synthesize* information to compare customs in Thai and American grain-farming communities. *Generalize* that although food and recreation differ in Thai and American grain-farming communities, both peoples need food in order to live, and obtain enjoyment from recreation.

LESSON UNDERSTANDING Although food and recreation differ in Thai and American grain-farming communities, both people need food in order to live, and both obtain enjoyment from recreation.

CONCEPTS culture, interaction, needs, values

MATERIALS NEEDED enough copies for the entire class of Item 4 in the Teacher's Resource Center

DEVELOPING THE LESSON

- 1. *Recalling.* Again, review with students the location of Thailand on page 148 or on the classroom globe. Ask students to review pages 32–49, pointing out pictures that show Thailand and the Thai people.
- 2. *Analyzing.* Have students look at the pictures on page 50. Then have two students take turns reading the questions. Now ask: How are these people alike? How are they different? Where do these people live? How can you tell? What are the people eating? Why aren't the people in both pictures eating sandwiches? (Elicit that rice is grown in Thailand, and wheat in the United States.) Then say: How would you feel if you ate rice for lunch every day instead of a sandwich? Why? How do you think the Thai people might

feel if they had to eat only bread and could eat no rice? Why do people who live in different parts of the world eat different foods?

▲3. *Classifying.* Begin the Chapter Unifying Activity by passing out copies of Item 4 in the Teacher's Resource Center. Have children look at the words at the left, and find the one that describes what the class has been discussing. Ask students to draw pictures, cut them from magazines, or write words to describe food in each of the three places listed.

Alternative Activity: If you think your students are capable, have them work in small groups to complete the "Food" and "Fun" columns on Item 4. In this case, students would work on pages 50–53 on their own instead of using Activities 4–15.

4. *Inferring.* Ask the class to look at the pictures on page 51. Have one student read aloud the first question. Then ask: Which picture shows people in Thailand? How can you tell? Which shows people in the United States? How can you tell?

5. *Interpreting.* Have one student read the second question on page 51, and ask the class for responses. For the top picture, ask: Why do you think the boys are riding the water buffalo? How does this make them feel? How can you tell?

For the bottom picture, ask: What is a picnic? Have you ever been on a picnic? Why do people have picnics? How do you think the members of the farm family feel? How can you tell?

6. *Contrasting.* Ask children to recall the meaning of the word *customs*. Then return to pages 50–51, and ask: What customs are shown? How are the customs alike? different?

7. *Interpreting.* Have students look at the top left picture on page 52. Ask: What are the people doing? Have you ever done this? Do you (or would you) like to fly a kite? Why?

8. *Interpreting.* Have children look at the top right picture on page 52. Ask whether anyone knows what this is called. (a Ferris wheel) Ask: Have you ever ridden on a Ferris wheel? Ask children to share their experiences.

9. *Interpreting.* Point out the bottom picture on page 52. Ask: What are the children doing? Have you ever done this? Did you like it?

▲10. *Classifying.* Have students refer to the pieces of paper you passed out



How are these pictures alike?
What are the people doing?
Do you ever do these things?



In what kind of community are these things happening?

Do they happen in your community? Why?

Pictures T: horse-pulling contest (U.S.); BL: children in swimming hole (U.S.); BR: people playing horseshoes (U.S.).

for the Chapter Unifying Activity. Have one student read aloud the first question on page 52. Ask students to find on their charts the word that describes the activities shown on the page. Then have children draw or cut pictures or write words to describe fun in Thailand. In the column for their own community, have them fill in any activities they have said they share with the Thais.

11. *Inferring.* Have children look at the pictures on page 53. Ask one student to read aloud the first question. Ask for responses. Make certain that children understand that the pictures show a wheat-growing community in the United States.

12. *Contrasting.* Have children look at the top picture on page 53. Explain that the people are having a pulling contest to see which horse or team of horses is the strongest. Ask: Do people in your community have horse-pulling contests? Why or why not? Why would people in Thailand not have horse-pulling contests?

13. *Comparing.* Have children look at the bottom left picture. Ask: What are the children doing? Do Thai children do this? How do you know? (If necessary, have children refer back to the bottom picture on page 52.)

14. *Contrasting.* Have children look at the bottom right picture on page 53. Ask: Do you know what the people are doing? Explain that they are playing horseshoes. If a child is familiar with the game, ask him or her to describe it to the class. Ask: Do we play horseshoes in our community? Why would the Thais probably not play horseshoes?

15. *Classifying.* Have children add to their lists the activities of people in wheat-farming communities.

16. *Synthesizing.* Have children review their lists. Ask: Do people in grain-farming communities in Thailand and the United States eat the same foods? Do they do the same things for fun? Are any of the activities done in both places alike? Which ones? (Have children save their lists.)

17. *Generalizing.* Ask: Why is it important for people in both the grain-farming communities—in Thailand and in the United States—to have food? (Food is a basic need.) Why do people in both communities do some things just-for fun?

Lesson 2 (pages 54–55)

OBJECTIVES

Observe pictures of Thai and American grain-farming communities. Interpret the way people in farm communities make use of towns. Synthesize information to understand how towns serve farm communities. Compare communities by adding to the model of their own community. Analyze why some facilities in every community are owned by everyone in the community. Infer that people live in communities to meet their needs. Synthesize information to describe community life in Thai and American grain-farming communities. Analyze why people in families help one another. Compare family life in the United States and in Thailand. Synthesize information to describe family life in Thai and in American communities. Generalize that although community and family life differ in Thai and American grain-farming communities, both peoples live in communities and in families to meet their needs.

LESSON UNDERSTANDING Although community and family life differ in Thai and American grain-farming communities, both peoples live in communities and in families to meet their needs.

CONCEPTS culture, interaction, interdependence, needs, values

MATERIALS NEEDED books showing community life in Thailand; Item 4 from the Teacher's Resource Center

DEVELOPING THE LESSON

1. *Observing.* Have children look at the pictures on page 54. Have one child read aloud the first question. Ask the class for responses.
2. *Interpreting.* Have children look at pictures of farms in their book or in magazines. Ask: Do farm families live near one another? How can you tell? Have children arrange the classroom furniture so groups of three, four, and five students are sitting as far away from one another as possible. Tell them that each group is to pretend to be a farm family. If children wish, they may role-play a bit, making the motions associated with various kinds of farm work. As children do this, put together several chairs in the center of the room. Place a sign in this area labeled "Town." Say to one group of



What are these farm families doing?
Why do farm families need towns?



What work do these people do around the home?

How do people in families help each other?

children: You need a new wagon. Where will you go to get it? Have some children from that group walk over to the area labeled "Town." Repeat this procedure until children can think of things they need and can go to the area labeled "Town."

3. *Synthesizing.* Read to the class the second question on page 54. Ask for responses.

4. *Comparing.* Have children add to the model they are making of their own community shopping centers, produce centers, and so on.

5. *Analyzing.* Have children look again at the pictures on 54. Point out the streets. Ask: Who builds streets in communities? How is this paid for? What do people get for working, at jobs? (money, income) Write the word *taxes* on the chalkboard. Ask children whether they have heard grown-ups talk about taxes. Ask whether they know what taxes are. Explain that people give to their community some of the money they get for working. This money goes to pay for roads, street lights, parks, community centers, and other things owned by everyone in the community. Ask: What other things are paid for by taxes? What workers are paid through taxes?

If fire stations, police stations, parks, community centers, and so on are on the model of their community, help children to point them out. If they are not yet on the model, have children add community-owned facilities to the model.

6. *Inferring.* Ask: Why do people live in communities? What would happen if each person had to buy his or her own street light? What would happen if he or she had to build a road to go someplace? What would happen if there were no police officers? no fire fighters?

▲ 7. *Synthesizing.* Have children look at books showing communities in Thailand. Then ask them to return to the charts they are making as part of the Chapter Unifying Activity. Ask them to find the words "Community Life" on the charts. Have them cut or draw pictures illustrating community life in each of the areas described.

8. *Analyzing.* Ask: Do you help with work at home? What do you do to help others in your family? Then have children look at the pictures on page 55. Have one student read the first

question. Ask: Do you do this kind of work at home? How is this like what you do? How is it different? Have one student read the second question. Ask the class for responses.

9. *Comparing.* Ask: Do you think people in Thai families help one another? Why? Why do you think people live in families? Discuss with students the basic reasons for the existence of families—protection and socialization of infants and children, the fulfillment of the need for love, the fulfillment of basic needs for food, clothing, and shelter. Then ask: Who lives at home with you? After several children have responded, say: Do most of us live with parents and brothers and sisters? Explain that in Thai families many relatives—not merely parents and children—live in the same house. Ask: How is this custom different from ours?

10. *Synthesizing.* Have children return to the charts for the Chapter Unifying Activity. Ask them to fill in the column entitled "Family Life."

11. *Generalizing.* Ask: Why do people in grain-farming areas in Thailand and the United States live in communities? How does community life differ? Why do they live in families? How does family life differ?

Lesson 3 (pages 56–57)

OBJECTIVES

Compare a house of worship in Thailand with houses of worship in the United States. *Compare* buildings in Thailand with buildings in the United States. *Compare* homes in Thailand with homes in the United States. *Infer* from information in a picture the purpose of a particular Thai building. *Synthesize* information obtained throughout the lesson to describe homes and clothing in Thailand and in the United States. *Generalize* that although homes and clothing differ in Thai and American grain-farming communities, both peoples build homes and make clothing to meet their needs.

LESSON UNDERSTANDING Although homes and clothing differ in Thai and American grain-farming communities, both peoples build homes and make clothing to meet their needs.

CONCEPTS culture, interaction, needs, values



What are these people doing?
Do you do things like these? What?



What are these people doing?
Do you do things like these? What?

Pictures TL: small town—the building at the left with the orange roof is a wat, or Buddhist temple (Thailand); BL: homes on river in small town (Thailand); R: people at the entrance to a wat.

MATERIALS NEEDED Item 4 from the Teacher's Resource Center

DEVELOPING THE LESSON

1. *Comparing.* Have children look at the pictures on page 56. Ask: Where do you think these pictures were taken? (Thailand) Why? Have students take turns reading the questions on the page. Explain that the children in the bottom picture are playing soccer—a game somewhat like football. Have children look at the building in the background. Explain that this is a religious building—a place where people go to worship. Ask students to compare this building with similar kinds of buildings in their community.
2. *Comparing.* Have the children look at the top left picture on page 57. Have students take turns reading the questions on the page. Explain that the large building on the left (with the orange roof) is a house of worship. Have children describe the other buildings. Ask: How are these like buildings in our community? How are they different?
3. *Comparing.* Have children look at the lower left picture on page 57. Ask them to describe what they see. Explain, if necessary, that these are homes. Ask: How are these homes different from homes in our community? in farm communities? How are they the same?
4. *Inferring.* Have the children look at the picture at the right. Ask: What kind of building might this be? Why do you think so? (Have children add houses of worship to their community model.)
5. *Synthesizing.* Ask children to refer to the charts they are making for the Chapter Unifying Activity. Have them add to the Thailand column information about clothing and homes. Ask them to review pages 50–55 to add information about homes and clothing in grain-farming communities in the United States. Finally, have them fill in all items for their own community.
6. *Generalizing.* Ask: Why do people in grain-farming communities in Thailand and the United States build houses? Why is it important for them to wear clothing? (Children should recall that houses, or shelter, and clothing are basic needs.)

Unit Review (pages 58–59)

OBJECTIVES

Classify methods and tools according to time periods. *Synthesize* information to put in sequence the activities involved in grain farming. *Recall* that farmers and city-dwellers are interdependent. *Generalize* that although people of grain-farming communities may have different cultures, in each community people depend on technology, on one another, and on people in other communities.

Valuing. Children are asked to express what they would tell and talk to people about if they visited a Thai community.

UNIT UNDERSTANDING Although people of grain-farming communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

CONCEPTS culture, environment, interdependence, needs, roles

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

MATERIALS NEEDED Item 5 from the Teacher's Resource Center

REVIEWING THE LESSONS

1. *Classifying.* Have children look at the top picture on page 58. Have one child read aloud the question. Also ask: What tool is this farmer using? (a plow) Now have one child read the question for the bottom picture. Then ask: Which picture shows how people plowed in the past? Which picture shows how wheat is cut today?

2. *Synthesizing.* Make a movie box out of a large cardboard box. Cut a big square out of one side. Cut slits to pull paper through. These slits should be cut along the edges of the box both above and below the square. (See Item 5 in the Teacher's Resource Center for pictorial instructions.)

Provide large pieces of butcher paper so students may make pictures for the movie box. Now divide the class into small groups or pairs.



How did horses help farmers long ago?



How do machines help farmers today?

Review



How do farmers help people in other communities?
How do other people help farmers?



What do these children do that is the same?
What might they do that is different?

Have Group 1 draw a picture of wheat growing in a field. Have Group 2 draw a picture of wheat being cut and cleaned. Have Group 3 draw a picture of a farm truck, loaded with wheat, pulling up to a grain elevator. Group 4 may draw the wheat being loaded from the grain elevator onto railroad cars. Group 5 may draw the wheat being ground into flour in a mill. Group 6 should draw a truck, loaded with flour, arriving at a bakery. Group 7 may draw machines making dough in a bakery. Group 8 may draw loaves of bread going into an oven. Group 9 may draw the packaging of the finished loaves of bread. Have Group 10 draw a bakery truck delivering the bread to a supermarket. Group 11 may draw a consumer purchasing a loaf. Group 12 should draw a child eating a sandwich.

Have the class share drawings and put them in sequence. Next, have children tape pictures together to make an ever-increasing roll for the movie box. Show the entire roll, and ask: What special jobs do these people have? How do the people depend on one another? How do tools and machines help them?

3. *Recalling.* Have students look at the top pictures on page 59. Ask students to read the questions for these pictures. Ask: Do we depend on farmers? How? Do farmers depend on city-dwellers? How?

4. *Valuing.* Have students look at the bottom pictures on page 59. Ask students to identify the community shown in each picture. Then have students take turns reading the questions.

Have children complete sentences such as these: "If I visited a grain-growing community in Thailand, I would tell the people, . . ." "I think I would be interested in, . . ." "If some Thai children came to visit me, I would show them, . . ." Repeat the process for an American grain-farming community.

5. *Generalizing.* Ask: How are grain-farming communities alike? What jobs do people have? Do people depend on one another? Do they depend on people in other communities? How? What tools and machines do people use? Why do they use tools and machines? Do people living in grain-farming communities have different ways of life? Explain.

Cattle-Raising Communities

OVERVIEW

This unit explores communities in which cattle are raised. The first chapter, *Cattle Raising*, emphasizes the natural resources needed for raising cattle and the technology involved in cattle raising. The second chapter explores the interdependence brought about by technology and specialization in meat and dairy processing. Finally, the third chapter, *People of Cattle-Raising Communities*, examines and compares the cultures of people in communities in Argentina and the United States.

UNIT UNDERSTANDING Although people of cattle-raising communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

MAIN CONCEPTS culture, environment, interdependence, needs, roles

RELATED CONCEPTS interaction, values, wants

SKILLS DEVELOPMENT

Students have further opportunity to use maps in the book as sources of data and to interpret elementary symbols on maps.

Language skills are extended through additional activities involving reading readiness and vocabulary development. In addition, students are encouraged to express their thoughts and feelings in writing.

See Skills Symbols at the beginning of each chapter.

Cattle Raising

CHAPTER UNDERSTANDING Because of technology, people in cattle-raising communities can make use of their natural resources to meet needs.

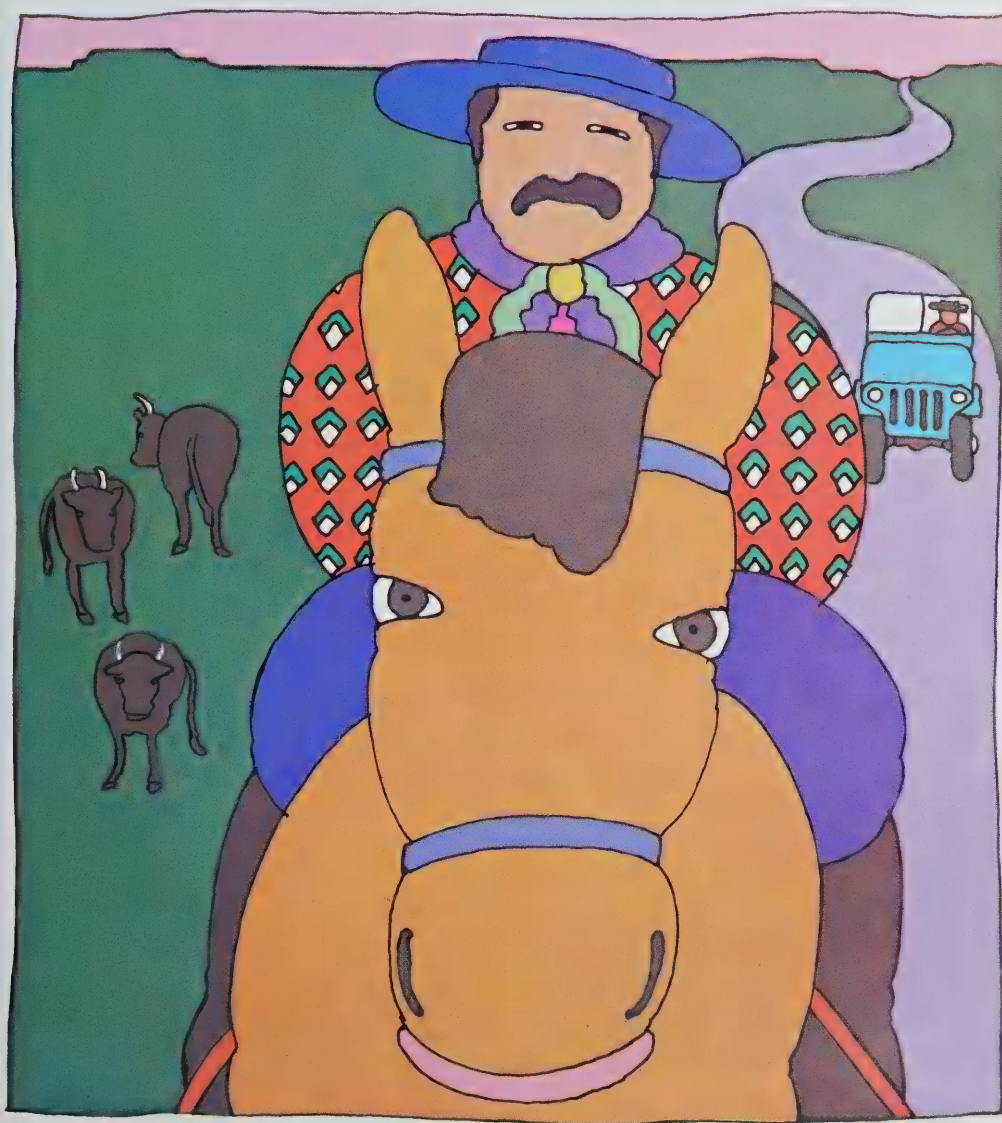
CONCEPTS environment, interaction, needs, roles

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ▲. Activities involving reading readiness, vocabulary development, and other language skills are designated by ■.



Cattle-Raising Communities



EVALUATION STRATEGIES

The Introductory Lesson is designed for evaluating material previously covered in the book and for diagnosing the extent of children's knowledge of material to be covered.

In addition, Activities 2, 3, 4, and 5 in Lesson 1; Activities 2 and 7 in Lesson 2; Activities 6, 7, and 8 in Lesson 3; and Activities 5 and 7 in Lesson 4 are especially appropriate for purposes of evaluation.

CHAPTER UNIFYING ACTIVITIES

1. If your area has a ranch, dairy farm, or other kind of farm on which animals are raised, plan a class field trip. Have students prepare questions to ask ranch workers. If there are no ranches or appropriate farms in your area, plan a visit to a zoo. There, children may see buffalo and perhaps oxen and cows.

2. Divide the class into six or seven groups. Have one group tape together sheets of paper and draw a life-size picture of a cow. Other groups may make life-size drawings of sardines, tuna, rice plants, wheat plants, and any other plant, animal, or fish raised in your area, or of special interest to the students. When working on their drawings, students should refer to the textbook and to an encyclopedia or to pictures in magazines. They should also use rulers or yardsticks for determining size and proportion.

Have students cut out the completed drawings and assemble them, from floor level up, along a wall of the classroom. Drawings should remain on display for several weeks so students may understand the size of plants and animals in relation to their own heights.

3. If a number of the students have pets, divide the class into groups. Each group should prepare an illustrated chart or booklet on how to care for one type of pet. Students may wish to interview a veterinarian after preparing questions about general guidelines for training and feeding. If feasible, they may want to plan and conduct a pet fair, inviting other classes to visit. As an alternative, students may add a pet to the class (in addition to their aquarium pets). Have them discuss an appropriate choice, ways to house and care for the pet, and rotation of responsibilities for care and feeding.

INTRODUCTORY LESSON

● Have students look at the pictures on pages 60 and 61. For each picture, ask: What do you see? What is happening?

Explain that the picture on the left shows a man in Argentina. Help students to find Argentina on the map on page 146. Then explain that the picture on the right shows someone in the United States. Have children once again find the United States on the map on page 146. Now ask students to identify all animals shown in the pictures.

Finally, ask: What animals have we seen in this book? (fish, horses, water buffalo, and so on) How were the animals used? How might the animals on these pages be used?

If you have access to the *People, Places, Products* Media Kit, display the study print for "Grain Farming."

Lesson 1 (pages 62–63)

OBJECTIVES

Define the word *ranch*. *Classify* resources into those that are natural and those that are made by people. *Synthesize* information to determine what cattle need to live. *Hypothesize* that similar natural resources are needed for cattle raising and grain farming. *Synthesize* information to check the hypothesis made in the previous activity and to determine that cattle raising depends on particular natural resources.

LESSON UNDERSTANDING Particular natural resources are needed for raising cattle.

CONCEPTS environment, interdependence, needs

DEVELOPING THE LESSON

▲ 1. *Defining*. Ask: What is a *ranch*? How is a ranch different from a farm? Have any of you ever visited a ranch? (Have children describe experiences.)

At this point, you may wish to use Chapter Unifying Activity 1.

2. *Classifying*. Have children look at the pictures on page 62. Ask one student to read aloud the first question. Ask students to identify everything they see in each of the pictures. List responses on the chalkboard. Have students compare sizes of buildings and areas in the pictures with your school building and areas around the school. Then read to



1

What do you see at these ranches?
How is the land being used?



What do these cattle need?

the class the second question on the page. Write on the chalkboard:

"Natural Resources" and Resources Made by People." For each of the responses you have listed on the chalkboard, ask: What kind of resource is this? Is it natural? Or do people make it or take care of it?

▲3. *Synthesizing*. Have students look at the pictures on page 63. Ask: Do any of you have pets? Ask children to identify their pets. Then ask: What do your pets need? What do you feed them? Why?

Ask: What do fish need? Why? What do plants need? Why? Then have one student read aloud the question. Write *grass* on the chalkboard. Then say:

There is a word very much like *grass*. It is *graze*. Write *graze* on the chalkboard. Ask: Can you guess what *graze* means? Discuss with the class that *grazing* means "eating grass and other plants directly from the ground."

Ask: Have you ever seen cattle grazing? Where? What do cattle need besides grass? (water, some protection from climate, and so on)

●4. *Hypothesizing*. Have children look at the map of cattle-raising areas on page 149. Then have children refer back to the map of rice and wheat areas on page 148. Ask: Are cattle raised in some of the same areas as wheat and rice? (Have children point out examples.) Ask: Why do you think that wheat and cattle are often raised in the same areas? (Do not correct responses at this time.)

5. *Synthesizing*. Ask: What natural resources do cattle need in order to live? How do you know? Are some of these natural resources the same as the natural resources needed for grain farming? Which ones? Why?

Ask: If people living in any part of the world made some kinds of resources, could they raise cattle? Why not? (Discuss briefly climate, rainfall, land, and so on.) Then ask: If we made some kinds of resources in our community, could we raise cattle? Why or why not?

● *Alternative Activity*: To extend and to help children answer questions in the main activity, refer back to Lesson 4, pages 144 and 145, of the student Resource Center. Use information on the rotation of the earth to ask why the North and South Poles are cold, why cattle couldn't be raised there, and so on.

Lesson 2 (pages 64–65)

OBJECTIVES

Classify foods according to whether they are meat or dairy products. *Synthesize* information to understand that cattle provide meat and dairy products. *Analyze* why there are different breeds of cattle. *Observe* pictures to make life-size drawings of various animals. *Infer* the reasons why some cattle are considered more valuable than others. *Interpret* stories about farm children and their animals. *Generalize* that people depend on cattle to meet needs.

LESSON UNDERSTANDING People depend on cattle to meet needs.

CONCEPTS environment, needs, values

DEVELOPING THE LESSON

1. *Classifying.* Ask: What did you eat for dinner last night? What did you eat for breakfast today? List responses on the chalkboard. Then, write "Meat Products" and "Daily Products" on the chalkboard. Have children point out meat products from the list of responses on the chalkboard. Copy these products under the appropriate head. Repeat the procedure for dairy products, but first ask children what dairy products are. If they do not know, explain that dairy products include milk, butter, and cheese.

Alternative Activity: If your class made a chart of the four basic food groups during their study of the unit entitled Grain-Farming Communities, ask: What did you eat for dinner last night? What did you eat for breakfast today? List responses on the chalkboard. Have children find on the food charts pictures illustrating their responses.

2. *Synthesizing.* Have children look at the pictures on page 64. Then ask one student to read aloud the question. Help children to point out products from the list of meat and dairy products you put on the chalkboard (or from the pictures of meat and dairy products on the chart of the basic food groups).

3. *Analyzing.* Ask: How many of you have dogs? Have any of your dogs had puppies? What did the puppies look like? Why? (Have several children respond.) If two dogs that have very short legs have puppies, will the puppies have very long legs? Why not? What kind, or breed, of dog do you have? (Ask several children to



What are cattle used for?

Pictures TL: Brahman bull (India); TR: Holstein cow (U.S.); B: Santa Gertrudis heifer (U.S.).



What does the ribbon mean?
Why do you think these men are happy?

respond.) Then say: There are different kinds, or breeds, of cattle too. Have the children look once again at page 64. Ask: How are these animals different from one another? For the top left picture, ask: If this bull fathered a calf, what would the calf probably look like? Why? For the top right picture, ask: What would the calves of this cow probably look like?

Explain that the animal in the top left picture is a Brahman bull. Say: This animal lives well in hot areas. Do you think this animal produces a lot of meat? (no) Ask children to examine the picture before they answer.

Explain that the top right picture shows a dairy cow. Ask: What products does this cow give us? Have students compare the appearance and use of the animals in the top two pictures.

Explain that the cow in the bottom picture is used for meat. Ask how it differs in appearance from the two other animals on the page.

Alternative Activity: To extend the main activity, have children draw pictures of imaginary animals and tell the class what the animals' parents might look like. Or have each student make pictures of two different imaginary animals. Then have students trade off pictures, and draw what the offspring of each pair of animals might look like.

4. *Observing.* Have students begin Chapter Unifying Activity 2, making use of the pictures on page 64.

5. *Inferring.* Have children look at the picture on page 65. Read aloud to the class the questions on the page. Ask: Have any of you ever gone to a fair or to another place where animals

received prizes? (Some students may have attended a dog show, if not a fair or livestock exhibition.) Ask: Why were the animals given prizes? Are the offspring of a prize animal valuable? That is, are the puppies of a prize dog valuable? Why? Why might the calves of a prize cow or bull be valuable?

▲6. *Interpreting.* Have children find library books about farm children. Ask children to tell about their books in class, explaining what part animals play in the story they chose.

7. *Generalizing.* Ask: What do we get from cattle? Why are they useful to us? Why do people take care of them? Why are some cattle more valuable than others?

Lesson 3 (pages 66–67)

OBJECTIVES

Interpret pictures to describe a cowboy's work. *Interpret* music to understand what cowboys do and how they have felt about their work. *Infer* the reasons for branding cattle. *Analyze* why fences are necessary on ranches. *Analyze* why cattle are herded and driven to corrals for shipment to markets. *Analyze* why cowboys use particular tools. *Interpret* the activities in the day of a cowboy. *Generalize* that people make use of technology in raising cattle.

LESSON UNDERSTANDING People make use of technology to raise cattle.

CONCEPTS environment, interaction, needs, values

MATERIALS NEEDED recordings of traditional cowboy music; a length of barbed wire; potato halves or modeling clay (optional)

DEVELOPING THE LESSON

1. *Interpreting.* Have students look at the pictures on page 66. Explain that the ranch at the left is in the United States, and the one at the right is in Argentina. Now have one student read the first question on the page. Ask for responses. If you wish, introduce the word *gaucho*.

Have another student read the second question. Again ask for responses. Ask: Why do cowboys use horses instead of automobiles or jeeps? (Call children's attention to the environment—the hilly terrain, and so on—and explain that horses are easy to move through herds of cattle.) Ask: Do you think a cowboy's work is hard? easy? Does it look like fun? Would you like to have this job? Why?

2. *Interpreting.* Bring to class records of cowboy music. (*Git Along Little Dogies*, *Home on the Range*, *The Lone Prairie*) Have children listen to the music and tell how it makes them feel. For each song, ask: What do the words tell about a cowboy's job? about the way cowboys have felt? *Alternative Activity:* Have students select or compose music, and develop rhythmic movements to show the motions of cattle and the activities of cowboys (mounted and on foot).

3. *Inferring.* Ask: Why do people put collars on dogs? Why do they put tags and licenses on dogs? Ask: What might people do to show that cattle



What are these men called?
What kind of work do they do?



What is happening in these pictures?
What tools are the people using?

Pictures TL: cowboys branding cattle (U.S.); TR: father and son repairing fence on the open range (U.S.); BL: gaucho herding cattle on the range (Argentina); BR: men herding cattle into corral (Argentina).

belong to them? Call children's attention to the top left picture on page 67. Discuss branding.

Alternative Activity: You may have children make up their own "brands" to identify themselves and their belongings. Have students design and then draw individual brands on potato halves. Then help them to cut around the design so that the design is raised. Roll tempera or poster paint on the brands, and have children reproduce them on pieces of paper.

4. *Analyzing.* Ask: What is a *thorn*? Encourage students to tell about any experiences they have had with thorns on rose bushes or other plants. Mention that early settlers in the United States planted bushes with thorns to fence in animals. Say: About a hundred years ago a person looked at some thorn bushes and got an idea for a new kind of fence. Can anyone guess what the idea was?

Call attention to the top right picture on page 67. If possible, display a length of barbed wire. Ask: What job are the people in the picture doing? Why is this work necessary? Discuss that fences must be maintained so cattle will not stray away or wander onto other people's property where they could destroy crops.

5. *Analyzing.* Have students look at the bottom left picture on page 67. Ask: Why must cattle be herded? Elicit that cattle must be rounded up to be shipped to market.

Have students look at the bottom right picture on page 67. Ask: What is happening? Explain that cattle are driven to corrals for shipment to faraway markets. Ask: What means of transportation might be used to move cattle over long distances?

6. *Analyzing.* Have the students review the pictures on page 67. Ask: What tools are being used? Why?

7. *Interpreting.* Replay some of the cowboy music. Tell children that as they listen to the music, they are to role-play a day in the life of a cowboy. They should try to perform the activities in sequence.

8. *Generalizing.* Ask children what tools (including machines and kinds of transportation) they pretended to use when they role-played a day in a cowboy's life. Ask: Why did you need these tools? Could people raise cattle if they did not have tools like these? Why or why not?

Lesson 4 (pages 68–69)

OBJECTIVES

Recall experiences they have had with veterinarians and doctors. *Analyze* why cattle are inoculated. *Compare* methods of branding cattle. *Analyze* why veterinarians care for cattle. *Hypothesize* what effects weather might have on cattle. *Infer* that winter snow and summer drought can harm cattle. *Generalize* that cattle must be protected because they help people to meet needs.

LESSON UNDERSTANDING Cattle must be protected because they help people to meet their needs.

CONCEPTS environment, needs, roles, values

DEVELOPING THE LESSON

▲ 1. *Recalling.* Ask: Have your pets ever become sick? How can you tell when your pet is sick? Have you ever taken a pet to an animal doctor? What are such doctors called? (vets, or veterinarians) What did the veterinarian do? Has a veterinarian ever given your cat or dog a shot? Why? (to cure a disease or to prevent one) Have you ever had a shot? Why? (At this point, you may wish to begin Chapter Unifying Activity 3.) *Alternative Activity:* If one of the children's parents is a veterinarian, invite him or her to class to discuss animal (especially cattle) diseases. Or perhaps a veterinarian in your community would come to class.

2. *Analyzing.* Have students look at the top picture on page 68. Ask: What is happening? How can you tell? Why do you think the bull is being given a shot? For what other things might cattle need a veterinarian?

Explain that cattle might become injured by stepping in holes, being cut by barbed wire, or swallowing foreign objects. Explain, too, that cattle may become sick from insects, contamination of water or food, poisonous weeds, or nearness to other sick cattle.

3. *Comparing.* Have students look at the bottom left picture on page 68. Explain to the class that the calf's ear is being tagged so that people will know who it belongs to. Compare this picture with the one at the top left on page 67. Ask: Which way of identifying cattle is easier for the cattle? Why do you think so?



How do these people help take care of cattle?
Why is this work needed?



How could winter cause problems for cattle?

4. *Analyzing.* Have children look at the bottom right picture on page 68. Ask: What is the veterinarian doing? Why?

5. *Hypothesizing.* Ask: How can weather cause problems for fishers? How can weather cause problems for grain farmers? Have one student read the question on page 69. Then ask: What might some of these problems be?

6. *Inferring.* Have children look at the pictures on page 69. For the top picture, ask: What might happen to cattle in very, very cold weather? Point out the second picture, and ask: How might a snowstorm affect cattle? (It is difficult for cattle to graze when the ground is covered with snow.) Ask: How might a rancher feed his or her cattle in a snowstorm? Try to elicit that, in winter, ranchers might use aircraft to drop hay and other food to cattle on the open range.

Ask: How could summer cause problems for cattle? What might happen to cattle if there is too little rain? Why?

7. *Generalizing.* Have students review the pictures on pages 68 and 69. Ask: Why do ranchers take care of their cattle? What would happen to a rancher if his or her cattle all got sick or died? What do ranchers get for raising cattle? Why do they get money for cattle? How are cattle useful to people? How would your lives be different if people did not raise cattle?

Have students make pictures of cattle-raising tasks to put in sequence or in a flow chart. Use this to have them compare tasks in fishing and farming. Continue the flow chart in the next chapter to include steps in processing.

Meat and Dairy Processing

CHAPTER UNDERSTANDING Because meat and dairy processing involve specialization and technology, people in cattle-raising communities depend on one another and on people in other communities.

CONCEPTS interaction, interdependence, needs, roles

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

Activities 5, 7, 8, 9, and 10 in Lesson 1 and Activities 1, 3, 4, 5, and 6 in Lesson 2 are especially appropriate for purposes of evaluation.

CHAPTER UNIFYING ACTIVITIES

1. Ask children to visit a local butcher or a meat counter in a grocery store. Help students prepare questions to ask about grades of meat, cuts of meat, and storage. Children may also ask their parents how they select and prepare various meats.
2. Have children bring to class empty, clean containers and packages from meat and dairy products.

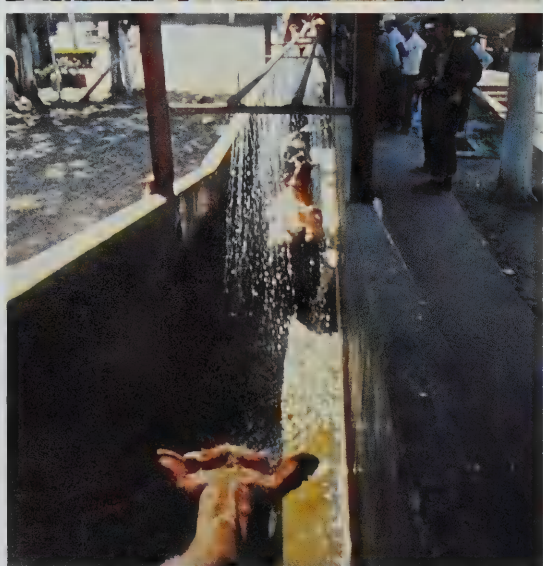
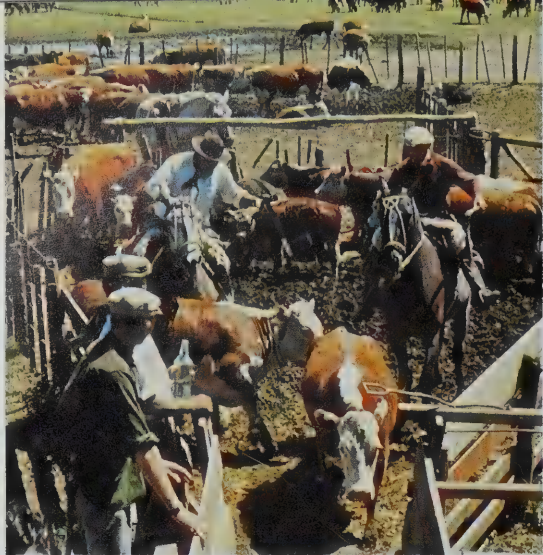
INTRODUCTORY LESSON

Ask: How many of you have seen your parents buy meat? How do they choose meat? Discuss how meat is displayed and sold in supermarkets and in neighborhood stores.

Lesson 1 (pages 70–71)

OBJECTIVES

Infer that particular means of transportation are used to move cattle. *Infer* that ranchers sell cattle to meat packers. *Generalize* that ranchers in cattle-raising communities and meat packers in other communities are interdependent. *Analyze* why cattle are cleaned before they are killed. *Analyze* why meat is inspected by government workers. *Hypothesize* what might happen to beef after it passes government inspection. *Analyze* steps in the distribution of meat. *Synthesize* information to determine who pays workers involved in processing meat. *Generalize* that because people in



2

What is happening here?
Where will the meat be taken?

Pictures TL: people herding cattle for shipment (Argentina); *TR:* buyers bidding for cattle at an auction (Argentina); *BL:* cattle being cleaned for slaughter (Argentina); *BR:* inspector examining sides of beef (Argentina).



Where do people go to buy meat?
Who gets part of the money?

meat processing have specialized jobs they are interdependent. *Generalize* that meat processing depends on technology.

LESSON UNDERSTANDING Because meat processing involves specialization and technology, people of cattle-raising communities depend on one another and on people in other communities.

CONCEPTS interaction, interdependence, roles

MATERIALS NEEDED play money; magazines (optional); *People, Places, Products* Media Kit (if available)

DEVELOPING THE LESSON

1. *Inferring.* Have children look at the top left picture on page 70. Discuss that cowboys are herding cattle. The cattle will be moved to places where they will be sold. Ask: What means of transportation might be used to move the cattle? (railroad cars, trucks, and sometimes airplanes)

2. *Inferring.* Have children look at the top right picture on page 70. Ask: What is happening? Discuss that the cattle are being sold. Ask: Who would want to buy cattle?

3. *Generalizing.* Draw two diagrams on the chalkboard: one showing fishers from several communities selling to one large cannery, and the other showing grain farmers from several communities selling to one large mill. Then ask for volunteers to draw on the chalkboard a similar diagram for ranchers and meat packers.

4. *Analyzing.* Have children look at the bottom left picture on page 70. Ask: What do you see? Why are cattle cleaned before they are killed?

▲5. *Analyzing.* Have students look at the bottom right picture. Ask: What has happened to the meat? What is the person in the picture doing? Write the word *inspect* on the chalkboard. Explain that the word means "to look at carefully." Ask: What does a person who has the job of an inspector do? What is the man in the picture inspecting? Why do people look carefully at beef? Discuss disease, possible spoilage, and quality of meat.

Now explain that inspectors do not work for meat companies but for everyone who eats meat. Have students recall how people who work for everyone in a community or an

area are paid. (by taxes) Discuss that people who work for all the people are part of their *government*. Have students briefly identify some other government workers.

6. *Hypothesizing*. Have one student read the last question on page 70. Ask the class for responses, and proceed to the next activity.

7. *Analyzing*. Have children look at the pictures on page 71. For the picture at the left, ask. What means of transportation are being used to move the meat? What other means of transportation could be used? Do you think that the truck might be kept very cold inside? Why?

For the picture at the top right, ask: What do you see? Why is meat kept in cold places? Why do you keep meat in your refrigerator at home?

For the picture at the bottom right, ask: What is this person called? Why might the meat store be cold inside? How is meat kept in supermarkets? Why? (At this point, you may wish to use Chapter Unifying Activity 1.)

8. *Synthesizing*. Have students take turns reading the questions on page 71. Ask for responses.

9. *Generalizing*. Write *specialization* on the chalkboard. Ask children to identify the special jobs shown on pages 70–71. Have students role-play ranchers paying cowboys, owners of meatpacking plants paying ranchers, butchers paying packing plants, consumers paying butchers, and so on. Pass out equal amounts of play money. Place in a central area a box labeled "Taxes." Have each child put one or two pieces of play money in this box. Have inspectors collect their pay from the box labeled "Taxes."

When the role-play is completed, ask each child to explain how his or her work depended on the work of others.

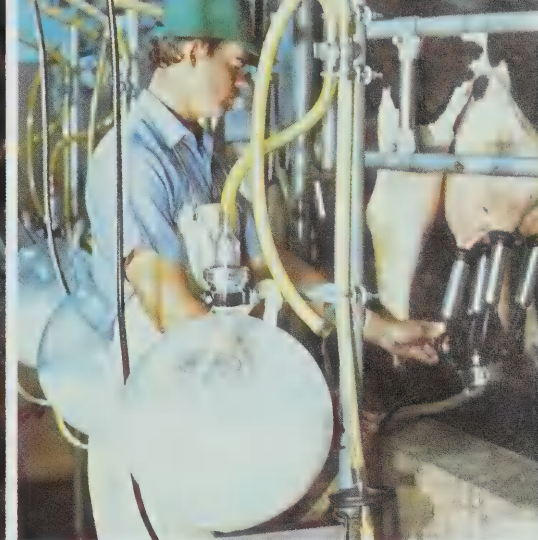
10. *Generalizing*. Have children review again the pictures on pages 70–71.

Ask: What tools and machines are the people using? What jobs could not be done without these tools and machines? Why?

Alternative Activity: If you have the *People, Places, Products* Media Kit, show the filmstrip "Cattle Raising."



What kind of farm is this?
What do people get from here?



What foods are made from milk?
How do such foods get to your house?

Pictures TL: person milking cow by hand (U.S.); TR: person milking cow by machine (U.S.); B: person removing milk carton from refrigerator (U.S.).

Lesson 2 (pages 72–73)

OBJECTIVES

Recall the meaning of the term *dairy foods*. *Analyze* why machines can milk cows more efficiently than can people. *Classify* milk products. *Infer* that people of dairy-farming communities depend on people in other communities. *Generalize* that because people in dairy processing have specialized jobs, they are interdependent. *Generalize* that dairy processing depends on technology.

LESSON UNDERSTANDING Because dairy processing involves specialization and technology, people of cattle-raising communities depend on one another and on people in other communities.

CONCEPTS interaction, interdependence, roles

DEVELOPING THE LESSON

1. *Recalling.* Have children recall the meaning of the term *dairy foods*. Then ask them to look at the picture and read the question on page 72. (You may begin Chapter Unifying Activity 2.)
2. *Analyzing.* Have students look at the top left picture on page 73. Ask: What is happening? Why do you think the cow's legs are tied?

Now have students look at the top right picture. Ask: Is this way of milking cows faster than the other way? Is it easier? Does it produce more milk? Is it cleaner? Why? Which of the two ways of milking depends on large machines and complex tools?

3. *Classifying.* Have students look at the bottom picture. Ask one student to read the first question. To help children answer, point to the containers the children are bringing to class for Chapter Unifying Activity 2 or to charts of the four food groups.
4. *Inferring.* Ask one student to read the second question on page 73. Ask: How does milk get to factories where it is put into cartons? from factories to stores? from stores to homes?
5. *Generalizing.* Have students name as many jobs as possible involved in raising dairy cattle and producing milk. Then have the class repeat the kind of role-play performed in Activity 9 of Lesson 1.

6. *Generalizing.* Ask: What tools and machines are used in producing milk? What jobs could not be done without these tools and machines?

People of Cattle-Raising Communities

CHAPTER UNDERSTANDING

Although people of cattle-raising communities may have different cultures, they share the same basic needs.

CONCEPTS culture, interaction, needs, values

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

The Introductory Lesson provides for evaluation of previous learning as well as evaluation of children's ability to apply learnings to form hypotheses.

Activities 6 and 7 in Lesson 1; Activities 4 and 5 in Lesson 2; and Activities 5, 6, 7, and 8 in Lesson 3 are appropriate for purposes of evaluation.

CHAPTER UNIFYING ACTIVITY

Have children plan a fiesta similar to Argentinean fiestas. Divide the class into groups according to areas of responsibility: food, decorations, music, games, and costumes.

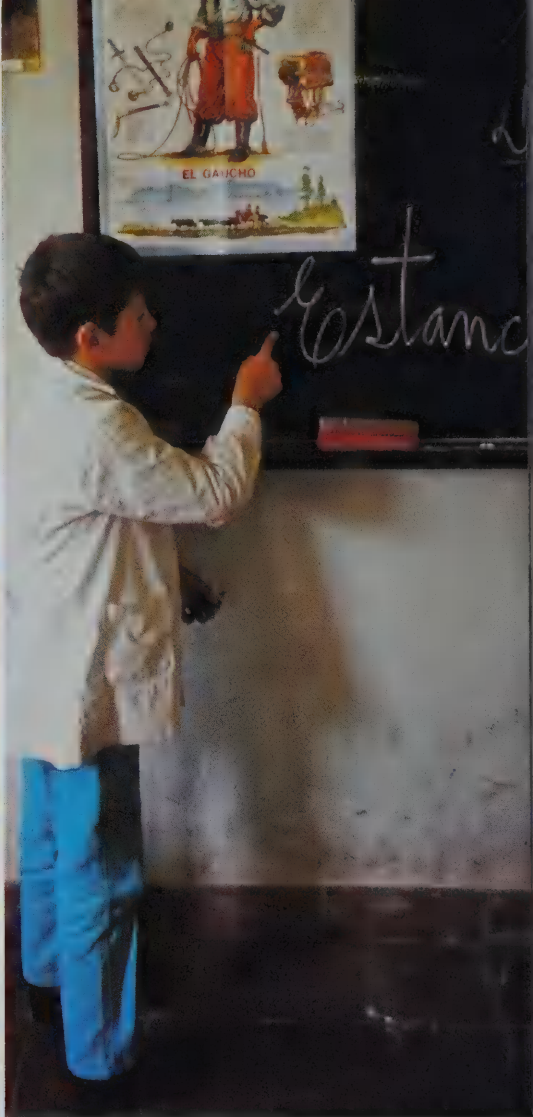
INTRODUCTORY LESSON

Have students complete orally sentences such as: "If I lived in a cattle-raising community in Argentina, I would have fun by . . ." "I would wear . . ." "I would eat . . ." Repeat this procedure for cattle-raising communities in the United States. List responses and save them.

Lesson 1 (pages 74–75)

OBJECTIVES

Compare what American and Argentinean children learn in school. *Compare* tools used by American and Argentinean cowboys. *Contrast* American and Argentinean clothing. *Analyze* why schools are far apart in cattle-raising communities. *Compare* American and Argentinean games. *Infer* which children are American and which are Argentinean. *Generalize* that Argentinean and American children each learn aspects of their own culture.



3

Some children travel a long way to school.
Why are schools sometimes far apart?



What games are the children playing?
What games do you play at school?

Pictures T: children playing basketball on school playground (U.S.); B: children playing (Argentina).

LESSON UNDERSTANDING In cattle-raising communities, children learn aspects of their own cultures.

CONCEPTS culture, interaction, values

DEVELOPING THE LESSON

1. *Comparing.* Have students look at the pictures on page 74. Ask: Where are these children? (in school) Which picture shows a child in the United States? Which shows a child in Argentina? How can you tell?

Point out the writing on the chalkboard in the picture at the right. Ask: Can anyone read this word? Explain that the word is part of the Spanish language. (*Estancia* means "ranch.") Ask whether any of the children's parents, grandparents, or other relatives speak Spanish.

For each picture ask: What is the child learning? Why do the children learn different languages in school?

▲2. *Comparing.* Call attention to the poster on the chalkboard in the right-hand picture on page 74. (If you have introduced the word *gaucho*, have children find it on the poster and recall its meaning.) Ask: Can you find the tool that is made of balls tied together with rope? Write the word *bola* on the chalkboard. Ask: What language is this word part of?

(Spanish) What would happen if a cowboy threw a bola at a running animal? Discuss that the balls would wind the rope around the animal's legs, causing it to fall to the ground. ▲*Alternative Activity:* Extend the main activity by making copies of Item 6 in the Teacher's Resource Center. Have children pronounce the English and Spanish words, and work in pairs to draw or cut from magazines pictures illustrating each word. Pictures should be pasted in the column entitled "Meaning."

3. *Contrasting.* Have children look at the clothes the children in each picture are wearing. Ask: How are the children's clothes different? Say: In most schools in Argentina, children wear the same kinds of clothes. What do we call clothes that are exactly the same? (uniforms) How is this Argentinean custom different from our custom? Do some American children wear uniforms to school? Who?

4. *Analyzing.* Have students take turns reading the sentences on page 74. Ask: How are cattle-raising communities different from cities? Do

people live close together in cities? Do people live close together on ranches? Why not?

5. *Comparing.* Have children look at the pictures on page 75. Read aloud the first question. Ask: Do you play this game? Then ask: What game are the children in the bottom picture playing? (drop the handkerchief or ring-around-the-rosy) Do you play any games like this one at school? What?

6. *Inferring.* Have children review the pictures on page 75. Ask: Which picture shows American children in school? Why do you think so? Which picture shows Argentinean children in school? How can you tell? (Call attention especially to clothing, or uniforms.)

7. *Generalizing.* Having children use the pictures as resources, ask: What do American children learn in school? What language do they learn? What games do they play? (Repeat the questions for Argentinean children.)

What do American and Argentinean children learn that is the same? What is different about their learning? Why do they learn different things?

Lesson 2 (pages 76–77)

OBJECTIVES

Analyze why rodeos are one form of recreation in cattle-raising communities. Interpret gaucho music. Compare gaucho music with the music of American cowboys. Infer that people in cattle-raising communities eat many meat dishes. Generalize that there are similarities and differences in recreation in cattle-raising communities.

LESSON UNDERSTANDING There are similarities and differences in recreation in cattle-raising communities.

CONCEPTS culture, interaction, values

MATERIALS NEEDED Argentinean gaucho music; American cowboy music

DEVELOPING THE LESSON

1. *Analyzing.* Have children look at the pictures on page 76. Ask one student to read the first question. Discuss that in broncobusting events riders try to stay on the horse as long as possible. Discuss that in steer wrestling, or bulldogging events, cowhands try to bring the steer to the



What are these people doing?
Where do you think they are?
What else might happen here?



A fiesta is like a party.
What things might people do at a fiesta?
What kinds of parties have you been to?

ground as quickly as possible.

Have another student read the second question. Write the word *rodeo* on the chalkboard, and pronounce and explain the word. Ask why people in cattle-raising communities might enjoy rodeos. Then ask: What do the events shown in the pictures have to do with ranch work? Have children compare bronco-busting with training, or breaking, horses. Ask them to recall the process of branding cattle, and ask what steer wrestling has to do with this.

Then have one student read the last question. Discuss calf roping, bull riding, and races of various kinds.

Ask: What do the things people do for fun in your community have to do with the kinds of work they do?

2. *Interpreting.* Write the word *fiesta* on the chalkboard. Pronounce and explain the word. Then have students take turns reading the first two sentences on page 77. Ask children to look at the picture at the left. Play recordings of Argentine folk songs and dances, such as the *resbalosa*, *zamacueca*, *vidalita*, and *tristes*. In these pieces of music, the rhythm reflects the gait of a horse, and both rhythm and words reflect the lonely life on the grasslands. Have children distinguish musical instruments such as the guitar, the mandolin, and the accordion. Then ask: How does this music make you feel? What does it tell you about the life of Argentinean cowboys? (You may wish to begin the Chapter Unifying Activity.)

3. *Comparing.* Replay some of the American cowboy music you brought to class. Ask: How is the music of American and Argentinean cowboys different? How is it alike?

4. *Inferring.* Have children look at the picture at the right on page 77. Ask: What is a *barbecue*? Why might people in cattle-raising communities have barbecues? What food is being cooked? Would you expect the people in these pictures to eat more meat than fish? Why?

5. *Generalizing.* Have one child read the last question on page 77, and ask for responses. Ask: How are the things you do for fun like the things done by Argentineans? How are they different? How are they like the things done by Americans in cattle-raising communities? How are they different?

Lesson 3 (pages 78–79)

OBJECTIVES

Analyze why people make objects that are both useful and attractive. Interpret pictures to determine the usefulness and attractiveness of various objects.

Infer from information in pictures the uses of a gaucho's equipment.

Synthesize information to explain why gauchos' belts are elaborately decorated. Compare food, shelter, and clothing in cattle-raising communities in the United States and Argentina.

Synthesize information to make a statement about the food, clothing, or shelter they would have if they lived in one of these communities. Generalize that although people of cattle-raising communities have the same needs, they meet them in different ways.

Valuing. Children are asked to express their own opinions about the attractiveness of particular objects.

LESSON UNDERSTANDING Although people of cattle-raising communities have the same needs, they meet them in different ways.

MATERIALS NEEDED books showing Spanish architecture and American Western architecture

DEVELOPING THE LESSON

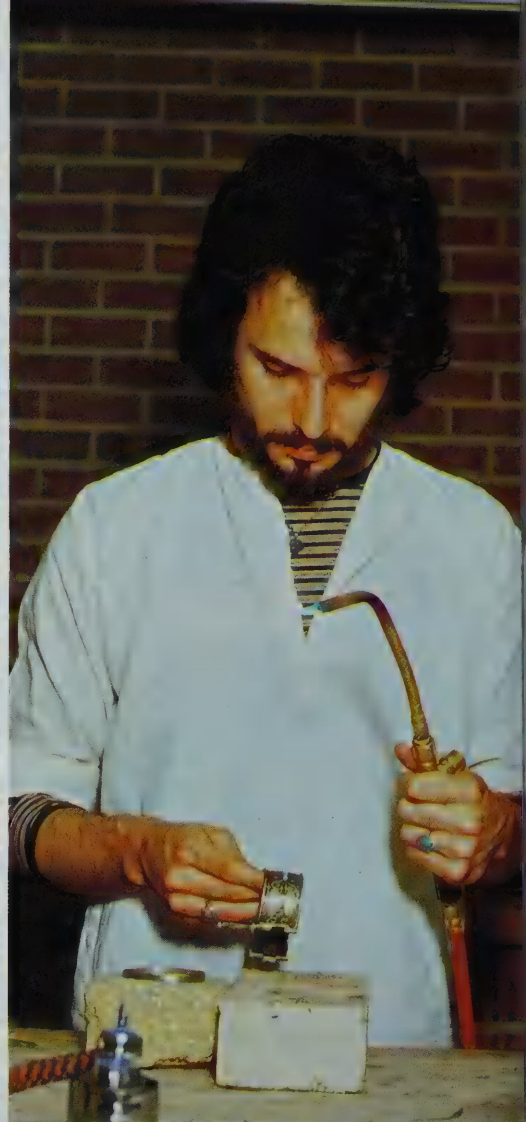
1. **Analyzing.** Have students look at the pictures on page 78. Ask one student to read aloud the first question. Pointing to the upper left picture, ask: What is a *moccasin*? Who wore moccasins in the past? Who wears moccasins today? Why do you think beads are put on moccasins? Why might people in cattle-raising communities make moccasins?

Pointing to the lower left picture, ask: Why are saddles important in cattle-raising communities? What are saddles made of? Why do people put designs on saddles?

Ask children to look at the picture at the right. Ask: What is the man making from silver? What might this be used for? Why do people wear things like this?

Have a student read the second question, and ask for responses.

2. **Interpreting.** Have students review the pictures on page 78. For each picture, ask: Is this useful? Is it pleasing to look at? Why? Why do people like to have pretty things? Why do you like to have them?



What are these people making?
What tools are they using?



Why do people make things like these?
What things have you seen people make?

8. **Generalizing.** Ask: Do people in cattle-raising communities in Argentina and the United States have the same needs? Why do you think so? Do they meet these needs in different ways? Why do you think so?

Unit Review (pages 80–81)

OBJECTIVES

Synthesize information to work with gameboards and to answer questions about pictures in the book. *Synthesize* information to determine how people of other communities depend on people in cattle-raising communities. *Synthesize* information to create games based on pictures of different foods.

UNIT UNDERSTANDING Although people of cattle-raising communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

CONCEPTS culture, environment, interdependence, needs, roles, values

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

MATERIALS NEEDED Items 7 and 8 of the Teacher's Resource Center

REVIEWING THE LESSONS

1. *Synthesizing.* Take a small group of four or five children to one corner of the room to review the pictures and text on pages 80–81. Have the rest of the students use gameboards like those shown in Items 7 and 8 of the Teacher's Resource Center. Students may work in groups of two, three, or four to use the boards. Students should spin a wheel or toss dice, and then follow the arrows to move the appropriate number of squares. If students land in a square with a picture of cattle raising and if they can explain the picture, they may move ahead four spaces. If they can't explain, they must remain where they are. If they land on a picture showing something that is harmful to cattle raising, they must move back two spaces. The winner of each game is the first player to reach the picture showing finished products.

Rotate groups so all students have an opportunity both to use gameboards and to sit with you and review pages 80–81. The following are suggested questions for these pages.



Why is this a good place to raise cattle?

What do cattle need?



How are their jobs alike?

How are they different?

Review



What is the same about these two pictures?
What is different?



What things do people do in every community?

Pictures TL: sides of beef hanging in a locker (Argentina); TR: variety of goods on display in a bakery (U.S.); BL: men playing guitars (Argentina); BR: family shopping (Thailand).

Page 80, top picture. Have children look at the picture. Ask two students to take turns reading aloud the questions. Ask: What natural resources are needed for raising cattle? How are resources made by people different from natural resources? What resources do people make in order to raise cattle?

Page 80, bottom pictures. Have children look at the pictures. Ask two students to take turns reading aloud the questions. For the picture at the left, ask: What is happening? Why are cattle herded? Where might these cattle be moved next? What means of transportation might be used? For the picture at the right, ask: What are the people doing? What might happen to rice after this is done? Why do people raise rice? Why do they raise cattle?

Page 81, top pictures. Have students look at the pictures. Ask two children to take turns reading the questions. Have children review the sequence of steps in meat processing. Ask what tools are used. Then ask what happens to wheat after it is cut.

Page 81, bottom pictures. Have students look at the pictures. Ask two children to take turns reading the questions. For each picture, ask: In what kind of community do these people live? What are they doing? Then ask: How are customs different in cattle-raising communities in Argentina and in rice-growing communities in Thailand? How are customs different in cattle-raising communities in Argentina and in the United States? How are customs alike? What do the people who live in both these communities need? Why?

●2. *Synthesizing.* Ask: What foods would we be able to eat if we had only the food we grow here in our community? Why do we need people in cattle-raising communities? Using the wall map in your classroom, have children trace with their fingers transportation links between midwestern cattle-raising areas, some major cities (like Chicago), and your community.

3. *Synthesizing.* Have students cut out magazine pictures of types of food. Then have children mount the pictures on cardboard, and make up games. For example, in one game, students might draw cards. The winner of the game might be the first to get three cards from the same food group.

Lumbering Communities

OVERVIEW

This unit highlights lumbering communities in British Columbia and in the Ivory Coast. The first chapter, *Forest Work*, explores forests as a natural resource. The second chapter, entitled *Lumber Processing*, deals with technology and specialization, which cause interdependence within lumbering communities and among lumbering communities and other communities. Finally, *People of Lumbering Communities* explores similarities and differences among people of different cultures by examining the lives of people in British Columbia and the Ivory Coast.

UNIT UNDERSTANDING Although people of lumbering communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

MAIN CONCEPTS culture, environment, interdependence, needs, roles

RELATED CONCEPTS interaction, values, wants

SKILLS DEVELOPMENT

Children extend their map skills by dealing with size and relationships among objects on maps. They are given an opportunity to make a map of their classroom. Furthermore, they are asked to interpret elementary symbols on maps to determine both location and the reasons why objects are located where they are.

Children are given an opportunity to work with an elementary timeline.

Language skills are furthered by additional vocabulary development, by reinforcement of vocabulary already introduced, and by opportunities for written expression and description.

See *Skills Symbols* at the beginning of each chapter.

Forest Work

CHAPTER UNDERSTANDING Because of technology, people in lumbering communities can make use of their natural resources to meet needs.

CONCEPTS environment, needs, values



Lumbering Communities

Picture loggers felling tree with a chain saw (British Columbia).



SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

Activities 1, 2, 3, 4, 5, and 9 in Lesson 1; Activity 9 in Lesson 2; and Activities 4 and 6 in Lesson 3 are especially appropriate for evaluation.

CHAPTER UNIFYING ACTIVITIES

1. If there are forest or woodland areas in parks in your community, plan a class field trip. Encourage students to note sizes of trees and differences in appearance. Have them touch the different kinds of bark, and collect twigs, leaves, and seeds that have fallen to the ground.
2. Encourage students to make collages or sculptures using pictures of trees, forest birds and animals, real leaves, twigs, pieces of bark, seed cases, pine cones, and so on.
3. Have groups of students collect pieces of various kinds of wood. Label and display each piece. Have students find pictures of the tree that yields each type of wood.
4. Have children adopt one or two trees near your school. Children should plan ways to identify the trees, determine the conditions in which they are growing, and decide what they can do to protect and promote their growth.

INTRODUCTORY LESSON

- Have children look at the pictures on pages 82 and 83. Ask: What are the people doing? What tools are they using? Where might they live?

Ask children to find British Columbia and the Ivory Coast on the maps on pages 146 and 147. Explain that British Columbia is an area in the country called Canada just as New York and Kansas are areas (states) in the United States. Then tell the class that the picture on page 82 shows people in British Columbia and that the picture on page 83 shows people in the Ivory Coast.

If you have access to the *People, Places, Products* Media Kit, display the study print for "Lumbering." Ask: Does the work in the pictures seem alike? How? How is clothing alike?

Lesson 1 (pages 84–85)

OBJECTIVES

Recall ways in which people use land. *Hypothesize* how forests might be useful to people. *Synthesize* information to find on maps the forests nearest to your community. *Analyze* why forests do not grow in all parts of the world. *Infer* that trees need sunlight, water, and nutrients in order to live. *Infer* what the environment is like in a rain forest. *Observe* trees in your community. *Generalize* that trees are natural resources.

Valuing. Children are asked to express their own feelings about trees.

LESSON UNDERSTANDING Forests are natural resources.

CONCEPTS environment, needs

DEVELOPING THE LESSON

1. *Recalling.* Have children look at page 84. Ask: How is the land being used? How is it like the land in grain-farming communities? How is it different? What natural resources do you see? What is a tree? How large are some trees? Discuss with the class that trees are growing things—they are plants. If possible, have students look at trees from the classroom window. Compare the heights of trees with the height of your ceiling and of the school building.

2. *Hypothesizing.* Have two students take turns reading the questions on the page. As children answer the second question, list responses on the chalkboard. Save responses so children may check them as they study the unit.

● 3. *Synthesizing.* Ask: Have you ever been to the forest? How did you get there? What did you do there? What do you see when you are walking in a forest? Have children look at the map of forest regions on page 149. Ask them to work in small groups, using this map and a wall map of the United States to find the forests nearest to their community.

● 4. *Analyzing.* Ask: Can people grow trees in all parts of the world? Have you ever traveled into the mountains? If you climbed very high mountains, you would arrive at places where there are no trees. Why do you think this might happen? (Trees do not grow at extremely high altitudes, where there is snow all year long.)



1

Why are forests important?
What do we get from forests?



What kinds of trees grow in your community?
How are they used?

Now have children look again at the map on page 149. Ask: Where on earth might there be no trees at all? Using the classroom globe, point to the North Pole and the South Pole. Ask: How might trees change as you get nearer to the poles? What reasons can you think of for the change? Discuss with the class that the nearer the forests are to the poles, the smaller the trees, until the tundra is reached. Point out desert areas on the map on page 149. Discuss why there are no forests in these areas. (climate, rainfall, and so on)

5. *Inferring.* Ask: What do wheat and rice plants need in order to grow? How are trees like these plants? How are they different? What do trees need to grow? Why do you think so?

6. *Inferring.* Have the class look at the picture on page 85. Explain that this picture was taken in the Ivory Coast. Ask how these trees differ from the trees in the picture on page 84. Have students once again find the Ivory Coast on the map on page 149. Explain that the Ivory Coast is in a rain forest. Ask: What do you think a rain forest is like? How might it be different from other forests? Do all trees need water? Why?

7. *Valuing.* Ask: Why do people plant trees in gardens and parks? How do you feel when you are somewhere where there are many trees? How do you feel when you are in a place where there are no trees?

▲ *Alternative Activity:* Have students write a story, poem, or brief description of their experiences in the woods, climbing a tree, building a tree house—picking fruit from a backyard tree, and so on. Ask them to tell how these experiences made them feel.

8. *Observing.* Use Chapter Unifying Activity 1. On the study trip (or, alternatively, during class observation of a tree near the school), begin to develop the meanings of the words *tree*, *trunk*, *branches*, *roots*, *twig*, *bark*, and the names of trees common in your community. (There will be an opportunity for children to work with these words in the next lesson.)

Then have children locate trees in the school vicinity and place them on the community model.

9. *Generalizing.* What would life be like without trees? Why are trees important to people? (Begin Chapter Unifying Activity 2.)

Lesson 2 (pages 86–89)

OBJECTIVES

Define the different parts of a tree and the words *logging*, *loggers*, and *lumbering*. Recall times they have seen trees being cut down. Analyze how trees are cut and moved. Infer the reasons why trees are cut down. Analyze how long it takes trees to grow. Infer that there are few towns and highways in logging areas. Analyze why logs are difficult to move. Analyze why people use heavy equipment to move and transport logs. Generalize that logging depends on technology.

LESSON UNDERSTANDING Logging depends on technology.

CONCEPTS environment, needs, roles

MATERIALS NEEDED copies of Item 9 from the Teacher's Resource Center; the *People, Places, Products* Media Kit (if available)

DEVELOPING THE LESSON

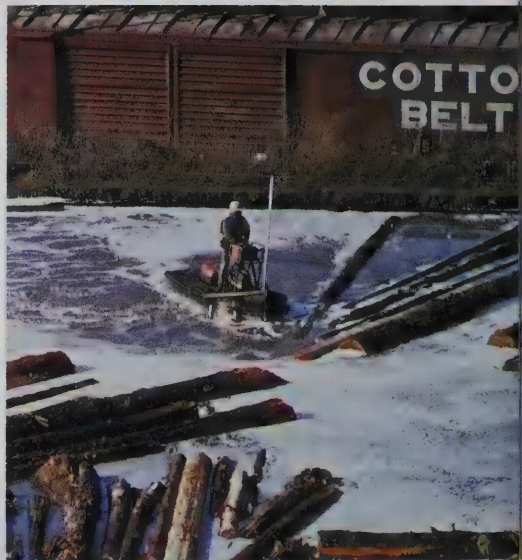
▲1. *Defining*. Pass out to all students or to pairs of students Item 9 from the Teacher's Resource Center. Discuss with students the meaning of each word, eliciting that the stump, for example, is the remainder of the trunk and its roots after the tree has been cut. The log is the trunk trimmed of its branches.

Write the words *logging* and *logger* on the chalkboard. Ask: What might these words mean? Why do you think so? Write *lumbering* on the chalkboard. Ask: What might this mean? Why do you think so?

2. *Recalling*. Ask: Have you ever seen a tree in your neighborhood or community cut down? Why was it being cut? Who was cutting it? What tools was the person using? (At this point, you may begin Chapter Unifying Activity 3.)

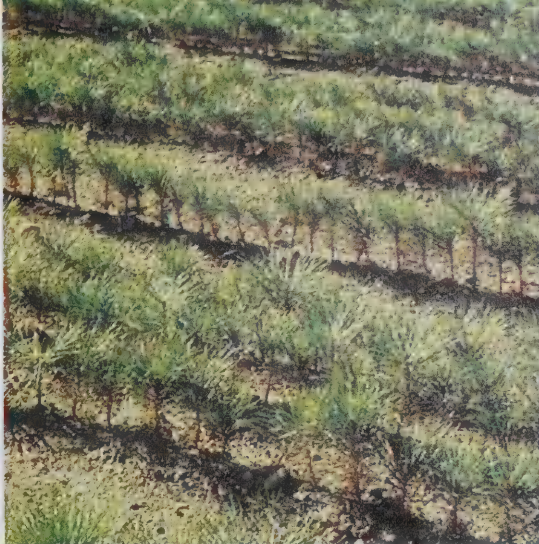
▲3. *Analyzing*. Direct children's attention to the pictures on page 86. Have students take turns reading aloud the questions. For the top left picture, ask: What might the orange bands be for? Why do people mark the trees to be cut? Why don't they cut down all the trees in a forest? When do you think trees are cut—when they are small or large? Why?

For the top right picture, ask: What is the man doing? What is he wearing on his head? Why might he wear a



What do these pictures show?

What do the people use to help them in their work?



What is happening here? Why?
What would happen if new trees were not
planted?

Pictures TL: tree stumps in a forest after trees have been cut (British Columbia); *TR:* rows of seedlings growing in a nursery (British Columbia); *B:* new trees growing in a fully developed forest after reforestation (British Columbia).

"hard hat"? What could happen when a tree falls? What kind of tool is he using? How is this like saws you have seen? How is it different? How might a saw with a motor be better than one without a motor? Why must the man use the saw carefully?

For the bottom left picture, ask: What is happening in this picture? What has happened to the tree? What is the man doing to the tree now? What kind of tool is he using? Why must he use this tool carefully?

For the bottom right picture, say: The logs were floated down a river to get to this pond. How does the boat help the man to keep the logs apart? Discuss with the class the meaning of the word *logjam*.

Alternative Activity: If you have access to the *People, Places, Products* Media Kit, show the filmstrip "Lumbering."

4. *Inferring.* Have students look at page 87. For the top left picture, ask: What has happened to the trees? How does this make you feel? Does cutting down trees hurt a forest? How might cutting help? Discuss that small trees get more light and space when big trees are removed. Compare this to thinning, as in home gardens.

For the top right picture, ask: What has been done here? How do trees grow? What did you learn about rice and wheat plants that would help you to know?

For the bottom picture, ask: What is happening here? Then have students take turns reading the questions on the page.

5. *Analyzing.* Ask: How long does it take for a tree to grow? Have children compare the growth period of trees in your community to the number of years before they themselves will be adults. Then, if you have had children make life-size drawings of different animals and plants, have them add to the class collection a figure of a young tree.

■ *Alternative Activity:* Have children work in groups to make elementary timelines. Timelines should show how long it takes each of the following to reach maturity: a tree in your community, a redwood, a human being, a wheat plant, a cow. (See Item 10 in the Teacher's Resource Center.)

6. *Inferring.* Have students look at the picture on page 88. Ask one student to read the first question. Ask: What does this picture tell you about

logging work? Are there towns and highways in forests? Explain that in some forest areas special roads are built for transporting logs.

7. *Analyzing.* Have students take turns reading aloud the questions on page 88. Ask: Is this a good way of moving logs? Why are logs sometimes hard to move?

8. *Analyzing.* Have students look at the top picture on page 89. Explain that in some places logs are skidded along trails to places where trucks are waiting. Ask: What is this machine used for? How is it different from the truck on page 88?

Then have students look at the bottom picture. Ask: Who has seen elephants in a zoo, at a circus, or on television? Permit students to contribute any information they have about elephants. Then ask: How do these animals help people? What part of the body does an elephant use to move logs? Explain that an elephant uses its trunk somewhat as we use our hands.

9. *Generalizing.* Have one student read aloud the second question on the page. Discuss with the class differences in natural environment, availability of tools, and so on. Then ask children to review pages 86–89. Ask: Which ways of moving logs are fastest? easiest? Why do you think so? Are tools important in logging? Why? Could logs be moved if people did not use tools? How? Would this be hard work? Would it take a lot of time? Why?



How are the logs being moved?
What do you think will happen to them next?



How are elephants and tractors alike?
Why are logs moved in different ways?

Lesson 3 (pages 90-91)

OBJECTIVES

Analyze why forest fires start. Compare fire fighting in their own communities with fire fighting in forest areas. Infer that fire fighting is dangerous work. Synthesize information to understand the effects of forest fires on animals. Analyze other ways in which trees can be harmed. Generalize that forests are natural resources which must be conserved.

Valuing. Children are asked to express their own ideas about conservation of forests.

LESSON UNDERSTANDING Forests are natural resources which must be conserved.

CONCEPTS environment, needs, roles, values

DEVELOPING THE LESSON

1. *Analyzing.* Have students look at the picture on page 90. Ask: What is happening? How does this make you feel? Have two students take turns reading the sentences on the page. Discuss that weather conditions, such as dryness and wind, contribute to forest fires. Ask: How might wind affect a fire?

Explain that some farmers start fires every spring to clear brush. Ask: If farmers do not watch brush fires, what do you think might happen?

Ask: How might cooks and campers start fires? What can people do to make sure they do not start fires when they are camping or cooking in forests?

2. *Comparing.* Ask: What happens when a house catches fire in our community? Discuss the kinds of fire-fighting equipment rushed to the scene. Then ask: What might happen when a fire breaks out in a forest? How might fire fighters reach the fire?

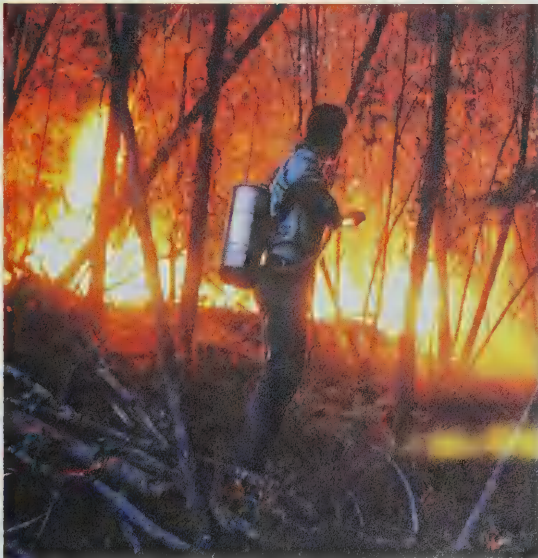
3. *Inferring.* Have a student read the first question on page 91. Ask the class to look at the pictures. For the left picture, explain that the airplane is dropping chemicals on the fire.

Point out the parachute in the top right picture. Ask: What kinds of things might be dropped to fire fighters? Why? Is this a good way of getting these things to fire fighters? Why?

For the lower right picture ask: What is this person doing? Do you



Fires destroy parts of forests every year.
How do forest fires start?



How do people fight forest fires?
What other things can harm trees?

Pictures L: airplane spraying chemicals on a forest fire (British Columbia); TR: parachute with supplies being dropped to fire fighters (British Columbia); BR: fire fighter (British Columbia).

think fighting forest fires is dangerous work? Why? What do fire fighters have to know in order to do their work?

4. *Synthesizing.* Ask: Can trees grow quickly again after a forest fire? How long does it take for trees to grow?

What happens to birds and other animals when there is a forest fire? Have students recall stories they have read or seen on TV to answer this question. You may want to read to the class parts of *Bambi* or some other story that shows the effects of forest fires on animals.

▲ *Alternative Activity:* Have students work in small groups or pairs to make posters showing and telling how forest fires may be prevented.

5. *Analyzing.* Ask one student to read the second question on page 91. Discuss diseases, insects, and lack of care by people (who can break branches, tear bark, and so on).

6. *Generalizing.* Ask: How do people enjoy forests? Do they need forests? Why? Are trees a natural resource? What can people do to protect forests?

Alternative Activity: To observe Earth Day, have students plan an assembly program or a presentation for other classes. Students might include songs and poems about trees, forests, and wildlife; dramatizations based on their own experiences in woodland recreation areas; and brief talks about conservation of community park resources.

7. *Valuing.* Ask for volunteers for a role-play. Have two or three children play the parts of campers who are riding motorcycles through the forests, leaving fires lit, and carving words on tree trunks. Then have two or three other children play the parts of another group of campers. Have these children decide what they would say to the first group. (You may wish to begin Chapter Unifying Activity 4.)

Lumber Processing

CHAPTER UNDERSTANDING Because lumber processing involves technology and specialization, people of lumbering communities depend on one another and on people in other communities.

CONCEPTS interaction, interdependence, needs, roles, values

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

The Introductory Lesson may be used to diagnose children's existing knowledge of the material to be covered in this chapter, as well as to evaluate their understanding of the material covered in previous units.

In addition, Activities 2, 7, 8, and 9 in Lesson 1; Activities 2, 4, 5, and 7 in Lesson 2; Activity 7 in Lesson 3; and Activities 2, 3, 4, 5, and 7 in Lesson 4 are especially appropriate for purposes of evaluation.

CHAPTER UNIFYING ACTIVITIES

1. Divide the class into three groups. Have one group begin to prepare a picture chart of wood products used in the home and of ways in which trees are or could be part of the environment of a home in your community. Have the other group do the same for the school and the community.

● 2. Before children study Lesson 2 in this chapter, have them work on Lesson 6, page 150, in the student Resource Center. The map skills developed there will help students to interpret a map of a lumbering community, a skill essential to their understanding of the concepts in Lesson 2.

INTRODUCTORY LESSON

Ask the children to look around the classroom. Pointing to different items made from wood, ask: What is this made of? Why do you think so? How do you think it was made? Do not correct responses at this point, but list them on the chalkboard so children may check against them as they study the chapter.



2

These people are marking logs and taking off the bark.

What will happen to the logs next?



How is the water being used?
What special skills do these people have?

Pictures T: people moving logs in a sawmill (Ivory Coast); B: people moving logs in a wood harbor (Ivory Coast).

Lesson 1 (pages 92–94)

OBJECTIVES

Observe a picture of logs being marked and stripped of bark. Infer that the people in a picture live in the Ivory Coast. Analyze why a wood such as mahogany is valuable. Hypothesize how mahogany might be processed. Analyze why logs are transported on oceans and rivers. Infer that logging can be dangerous work. Hypothesize what might happen to logs at lumber mills. Recall how logs are transported. Generalize that people make use of specialization and technology to transport logs to areas where they are processed.

LESSON UNDERSTANDING The transporting of logs to places where they are processed depends on technology and specialization.

CONCEPTS culture, interdependence, roles, wants

MATERIALS NEEDED a piece of mahogany

DEVELOPING THE LESSON

1. *Observing.* Have students look at the pictures on page 92. Read aloud the first sentence to the class.

- 2. *Inferring.* Ask: In what country might these people live? Once again, point out the Ivory Coast on the classroom globe or on the map on page 147. Ask: How are the people dressed? What tools are they using?
- 3. *Analyzing.* If possible, display a piece of mahogany to the class, and have students compare it with softer, lighter woods. Call attention to the appearance of the mahogany, and ask why people might want to use it for furniture. Explain to the class that this wood is hard to find and to transport. Ask: Why would a chair made from this kind of wood probably cost more than a chair made from another type of wood? (At this point, you may wish to begin Chapter Unifying Activity 1.)
- 4. *Hypothesizing.* Explain that the logs shown on page 92 are mahogany. Point to the man taking off bark. Ask: Why do you think he is doing this? What tools is he using?

Then have one student read the second question. Ask: What do people do to these logs to turn them into a mahogany chair or a piece of mahogany like the one you have seen? Discuss the size of the logs in the picture, and have students mark

off in the classroom the approximate space and height a log would occupy.

5. *Analyzing.* Have children find the Ivory Coast and British Columbia on the maps on pages 146 and 147. Ask: Are these places near water? How can you tell? What do we call big areas of water like these? (oceans) Then ask: How might oceans be used to transport logs from forests to other places? (Log rafts are towed along coastlines.) Ask: How might rivers be used?

Have students look at the pictures on page 93. Ask one student to read aloud the first question. Directing children's attention to the pictures, ask: Do you think this is a good way of moving logs? Could you move a log that was lying on the ground? Could you move one that was in the water?

6. *Inferring.* Ask one student to read the second question on page 93. Ask: What could be dangerous about this work? What must the people need to know if they are to keep safe?

7. *Hypothesizing.* Ask: Why is wheat sent to mills? What is done to wheat at mills? What might be done to lumber at a lumber mill? Tell the class that lumber mills are also called *sawmills*. Ask: What clue does this give you about what will happen to the logs?

8. *Recalling.* Have students look at the picture on page 94. Have one student read the first question. Ask the class for responses. (The logs may have been floated down a river or the ocean, or they may have been transported by truck or barge.)

Explain that logs are stored in ponds in lumber mills. Discuss that water protects logs against insects, stain, and fire.

9. *Generalizing.* Ask: What machines do you see in the picture on page 94? Why are there no people around? Discuss that a few people can operate the machines. Then ask: Why do people have to learn how to run large machines? What did the people who floated the logs down the river need to know in order to do their work? What did the people who marked and took the bark off logs need to know? Did each of these kinds of workers have a special job? Write the word *specialization* on the chalkboard. Ask students to use this word to make a statement about the pictures on 92-94.



How did the logs get to this lumber mill?
What will happen to them now?



What kinds of work do you see being done?
What has happened to the logs?

Pictures TL: logs entering mill (British Columbia); TR: machine de-barking logs (British Columbia); BL: saw crosscutting logs (British Columbia); BR: stack of boards (British Columbia).

Lesson 2 (pages 95–97)

OBJECTIVES

Observe pictures of steps in the processing of lumber. *Infer* how lumber is transported from one place to another. *Analyze* why logs are cut into boards before builders and furniture manufacturers use them. *Hypothesize* what means of transportation might be used to move lumber from mills to factories. *Infer* that people receive income for their work in processing lumber. *Recall* experiences they may have had in lumberyards in their own community. *Generalize* that people of lumbering communities are interdependent.

LESSON UNDERSTANDING People of lumbering communities depend on one another.

CONCEPTS interdependence, needs, roles, wants

MATERIALS NEEDED Lincoln Logs, or pictures of log cabin construction

DEVELOPING THE LESSON

1. *Observing.* Have students look at the pictures on page 95. Ask: Where are the logs now? (lumber mill, sawmill) How do you know? Have one student read aloud the first question on the page. For the top left picture, ask: Why might logs be cleaned? What might happen if there were stones and other hard objects on the logs when the saws started cutting? Then ask: How are the logs being picked up? Is this being done by a person or by a machine? What must be done if machines are to run? (People must operate them.)

For the top right picture, say: This machine is taking the bark off the logs. Have students compare this method with the one shown on page 92. Ask: Which way is easier? faster?

For the bottom left picture, explain that the logs have been moved to a saw that cuts them so they have four straight sides. Ask: How is this saw like saws you have seen? How is it different? What would a person have to know in order to run this saw?

Explain that the logs are next moved to other saws that will cut them into smaller boards. Yet another machine makes the boards smooth.

Direct the children's attention to the bottom right picture, and ask one student to read the second question

on the page. Explain that the logs have been stacked up outdoors to dry.

If you wish, tell children that lumber goes from lumber mills to planing mills, where it passes through machines that have sharp knives in them. These machines make the boards even more smooth.

2. *Inferring.* Have students look at page 96. Ask: How do you think the lumber was moved to this place? What means of transportation do you see? How will the lumber be moved from here to another place?

3. *Analyzing.* Have two children take turns reading aloud the sentences on the page. Ask: Have you ever seen boards like these? What were they used for? (houses, buildings, furniture, fences) Ask whether anyone has seen a house or barn being built. Ask: What did the wood look like? Did the builders have a big tree that they sawed into pieces? Encourage students to describe the different sizes of the wood used. Ask: Why is wood cut for building?

Have students work with Lincoln Logs or analyze pictures of log cabin construction to compare simple methods of wood construction with those that involve more processing.

4. *Hypothesizing.* Ask: How might lumber get to builders and furniture-makers? Have students look at the pictures on page 97. Ask: What means of transportation do you see? 5. *Inferring.* Have one student read the first question on the page. Ask: What do builders and furniture-makers give to owners of mills? Who pays builders for the wood used in a house? Who pays makers of furniture for the wood used in furniture?

6. *Recalling.* Have one student read the second question on the page. Ask: Has anyone you know ever bought lumber? Where did they go? Discuss with the class the purpose of lumberyards. If there is a lumberyard in your area, ask children whether they have visited it, and have volunteers describe their visit. Encourage descriptions of sights, sounds, and smells. Then say: Imagine you could buy some wood at the lumberyard. What would you like to make with it? Permit students to describe what they would like to make (swing, dog house, toy boat), and why. (Have students add lumberyards



This wood is being piled up.
What might the wood be used for?



Where do you think this wood will go?
Where would you go to buy wood?

to the model they are doing of their own community.)

● 7 *Generalizing.* Have children review the pictures on pages 95–97 (Chapter Unifying Activity 2 should have been used by this point.) Then ask them to turn to page 151 in the student Resource Center. Use the lesson appearing there. After children have studied the map on page 151, write "sawmill," "logs," and "lumber" on the chalkboard. Ask: Which comes first? Put the number "1" by "logs." Repeat the procedure for the other two words.

Then have children, using the map on page 151, point to the sawmill, the railroad, and so on, and tell which people in this community depend on one another. For example, a child may point to the logs, and say: "The people in the sawmill depend on the people who cut the logs." Or a child may say, "The people in the sawmill depend on the people who run the train to move the logs."

Have students begin a flow chart, beginning with the planting of trees and going on to logging activities and sawmill processing. In later lessons, have different groups add flow charts of tasks involving the manufacturing and marketing of different wood products.

Alternative Activity: Have students review the pictures on pages 95–97. Ask volunteers to take turns pantomiming the actions of a machine or a worker in the lumbering process. The class should try to guess what is being pantomimed. After each pantomime, ask: What tool/worker is this? Who does the worker depend on? Who depends on the worker?

Lesson 3 (pages 98–99)

OBJECTIVES

Observe their own textbooks to determine that books are made of paper, a wood product. *Analyze* how wood chips are processed into paper. *Recall* whether they have seen sawdust and how it was used. *Predict* what wood products may be replaced with wood or nonwood products in the future. *Infer* why plywood is used in a variety of products. *Generalize* that lumbering communities and other communities are interdependent.

Valuing. Children are asked to determine how they may help to conserve wood products.

LESSON UNDERSTANDING People in lumbering communities and other communities are interdependent.

CONCEPTS interdependence, needs, roles, wants

MATERIALS NEEDED samples of plywood; pieces of cellophane

DEVELOPING THE LESSON

1. *Observing.* Have students look carefully at and feel the pages of their books. Ask: What are your books made of? Does paper look as though it came from wood?

2. *Analyzing.* Have students look at the pictures on page 98, and ask one student to read aloud the first question.

For the top left picture, ask: What do you see? Have students look at the pictures on page 95 to note how wood chips fall to the ground. These are saved and sent through a machine that cuts them into smaller chips.

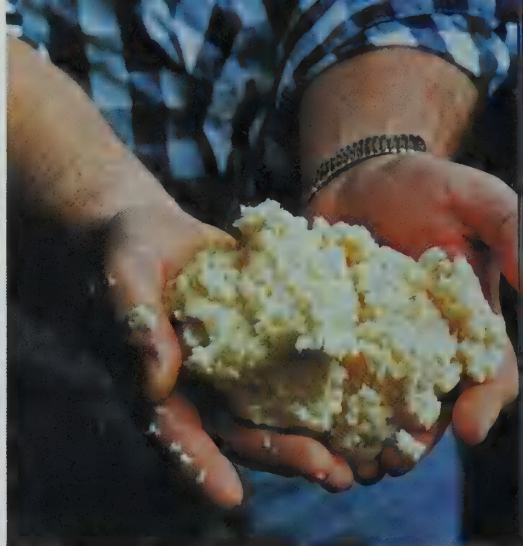
For the top right picture, explain that pulp mills treat the chips with chemicals that make them into wood pulp. Ask: What has happened to the chips? What might pulp feel like? Do you think it is soft? Why?

For the bottom picture, ask: What do you see? What kind of machine is this? What does this product look like?

3. *Recalling.* Ask one student to read aloud the second question on the page. Ask: What is *sawdust*? Have you ever seen anyone use a saw? Did you see sawdust fall to the ground?

Ask: Have you ever seen sawdust used to pack things in boxes? Why is sawdust used for this? (Sawdust is used for packing, fuel, and insulation.)

4. *Predicting.* Have the class examine pieces of colored and plain



How is wood being changed?

What other products do we get from wood?



This wood is put together in layers.
Why might some woods be put together
this way?

Pictures T: plywood cutouts spelling "love" (U.S.); B: close-up of plywood cutout of letter "e"—the close-up shows the grain and the layers of wood (U.S.).

cellophane. Ask: Where might the cellophane have come from? Again, point out the pictures on page 98 and explain that cellophane is made in a similar way, although other materials are added.

Ask: How is cellophane used in your homes? Why is it used in these ways? Ask questions to develop the idea that paper, a wood product, has in many cases been replaced by cellophane, another wood product.

Next have students imagine which wooden items in their homes might be replaced in the future with new wooden items or items made of plastic or other new materials.

5. *Inferring.* Have students look at the pictures on page 99. If possible, display samples of plywood. Then have two students take turns reading the sentences on the page. Having students examine the samples or the pictures, ask: Is there more than one piece of wood here? Why do you think so? (Plywood is composed of several pieces of wood pressed together.) Ask: What might be used to hold the pieces together? (glue) Is plywood like a sandwich? Why is wood put together this way? Explain that a thin sheet of expensive wood is used for the outside and less expensive wood for the inside. Ask: Why might this be done?

6. *Valuing.* Ask: Do you think the people of the world use much lumber? much paper? Why? What does this do to our forests? Will more and more trees be cut down? What would happen if one day there were no forests? Do you think we should save as many trees as we can? Why? Have the class begin a list of ways people (and they themselves) can conserve wood products.

Alternative Activity: If there is a recycling center in your community, plan a class study trip. Have children prepare questions to ask the workers.

▲7. *Generalizing.* Have children bring to class samples of paper products or empty containers used for paper products. Then have children work in small groups or in pairs to describe how paper products get to their homes. (You may want to pair children of different abilities so one child may draw or cut pictures from magazines while the other child writes descriptions for the pictures.) Have children share their completed work.

Lesson 4 (pages 100–101)

OBJECTIVES

Infer that pencils are made of wood. *Classify* wood products. *Synthesize* information to point out wood products in pictures. *Synthesize* information to point out, once again, wood products. *Classify* wood products according to a variety of categories. *Classify* ways in which wood products help people to meet needs.

Valuing. Children are asked to write about or describe their favorite toy.

LESSON UNDERSTANDING People depend on wood products to meet a variety of needs.

CONCEPTS interdependence, needs values, wants

MATERIALS NEEDED newly sharpened pencil, a piece of cedar; magazine pictures

DEVELOPING THE LESSON

1. *Inferring.* Have students look around their desks and name all the things made of wood. Ask: What do you hold in your hand that is made of wood? Have students smell a newly sharpened pencil and compare the scent to that of a piece of cedar from the class wood collection.

2. *Classifying.* Ask: What wood products seem very much like the trees they came from? (a mast, a telephone pole, a fence post) How are these products different from chairs, desks, and pencils? Which takes more work to make—a fence or a chair? Why?

3. *Synthesizing.* Now have students look at the pictures on page 100. Ask two students to take turns reading aloud the questions. As students point out each object, ask: How is this used? Could it be made of something other than wood? What? Why do you think it is made of wood?

4. *Synthesizing.* Have students look at page 101. Ask two students to take turns reading the questions. List on the chalkboard each item mentioned. For each item, ask: How do we use this? Could it be made of something other than wood? What? Why do you think it is made of wood?

Alternative Activity: Conclude Chapter Unifying Activity 1.

5. *Classifying.* From a mixed set of magazine pictures, have students



How is wood being used here?
Can you find all the things that are made
of wood?



How has wood been used here?
What things in your classroom are made
of wood?

select those that show objects made of or from wood. Ask one student at a time to select a picture and tell why wood was used in the object shown. After each student has had a chance to select a picture, have volunteers group pictures in whatever categories they consider appropriate—according to use (in furniture, walls, doors, and so on); according to type of wood; according to the type of wood product—lumber, paper, sawdust, and so on).

Alternative Activity: Have students pretend that wood no longer exists. Ask them to think for a minute. Then have volunteers describe what they could *not* do that they now do.

▲6. *Valuing.* Ask children to tell which of their favorite toys are made of wood. You may ask them to write a few sentences or describe to the class why that particular toy is their favorite.

7. *Classifying.* Have children recall what people need in order to live. Write "Food," "Clothing," and "Shelter" (or "Houses") on the chalkboard. Then ask: How do trees help us to meet our needs? Have children make an illustrated chart of fruit-bearing trees, and compare lumber and fruit trees with beef and dairy cattle. You might explain that pulp mills process wood chips into rayon and plastics used in clothing. Have children discuss why houses and other buildings are often made of wood.

People of Lumbering Communities

CHAPTER UNDERSTANDING

Although people of lumbering communities may have different cultures, they share the same basic needs.

CONCEPTS culture, environment, needs, values, wants

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

The Introductory Lesson gives children an opportunity to make a hypothesis which they may check as they proceed through the chapter.

Activities 2, 3, and 4 in Lesson 1; Activities 2, 3, 4, and 6 in Lesson 2; and Activities 3 and 7 in Lesson 3 are especially appropriate for evaluation.

CHAPTER UNIFYING ACTIVITIES

1. Have students prepare dioramas to show recreational activities in each of the communities studied thus far, as well as in your own community.
2. Plan a study trip to a museum to see Native American and African art. As students look at carvings, etc., have them describe their own experiences making objects from wood.

INTRODUCTORY LESSON

● Point out British Columbia and the Ivory Coast on the classroom globe. Ask: Do you think the people in both these places have the same customs? Why might they have different customs? Tell children they will have a chance to check their guesses as they study the next few pages in the book.

Lesson 1 (pages 102–103)

OBJECTIVES

Hypothesize how lumbering communities might differ from other communities. *Compare* skills children learn in school in the Ivory Coast and British Columbia. *Infer* that schools teach children the customs of their culture. *Synthesize* information to understand that children learn aspects of their culture outside, as well as inside, school.



3

Why do you think the homes are near the water?

What do you see in the water?



Why do people learn different things in different countries?
How are schools around the world the same?

LESSON UNDERSTANDING in lumbering communities, children learn aspects of their own cultures

CONCEPTS culture, environment, roles

DEVELOPING THE LESSON

1. *Hypothesizing* Ask students to look at the picture on page 102. Explain that it shows a lumbering community in British Columbia. Have students take turns reading aloud the questions on the page. Ask for responses. Then ask: How might lumbering communities be different from our community? How might they be different from big cities? What might people of lumbering communities do that is different from what we do?

2. *Comparing* Ask students to look at the picture on page 103. Explain that this picture shows children in school in the Ivory Coast. Ask: What do you see? What might these children be doing? Explain that they are learning arithmetic. Ask: Do you learn this? Why? How might arithmetic help you when you grow up? Why are the children in the picture learning arithmetic? What other things do you think these children learn in school? Do you think they learn to read and write? Why? Do they speak the same language we do?

Now ask: What do you think children in British Columbia learn in school? Encourage children to give as many answers as they can. Say: Children in British Columbia learn to speak English—the same language we learn to speak, because the land was settled by people from England. People in other countries speak different languages.

▲ 3. *Inferring* Ask one student to read aloud the first question on page 103. Have students recall the meaning of the word *customs*. Ask: Do people have different customs? What are some different customs we have seen in this book? Why do you learn the customs you do? Would you expect children in the Ivory Coast to learn the same customs you learn in school? Why not?

4. *Synthesizing* Ask: Do you learn things only in school? What have you learned to do outside school? List responses on the chalkboard. Then ask: Who taught you to do these things? Have you always been in school? How did you learn when you were a small baby? Who taught you?

Why do children learn how to do things in families? What do you think children learn in families in the Ivory Coast and in British Columbia? How might the things children learn in families in the Ivory Coast be different from the things you learn in your families? What different customs might they learn?

Lesson 2 (pages 104–105)

OBJECTIVES

Observe pictures of boat-building in British Columbia and in the Ivory Coast. Compare clothing in British Columbia and the Ivory Coast.

Synthesize information to understand that homes in the two communities differ because of climate, natural environment, and culture. Infer that people in lumbering communities take part in some recreational activities that are work-related. Analyze why people play games. Generalize that although clothing and shelter are different in British Columbia and the Ivory Coast, in both communities people must have these things to meet their needs.

LESSON UNDERSTANDING Although clothing and shelter differ, people in lumbering communities must have these things to meet their needs.

CONCEPTS culture, environment, needs, values

MATERIALS NEEDED illustrated books showing buildings and homes in British Columbia and the Ivory Coast

DEVELOPING THE LESSON

▲1. *Observing.* Ask students to look at the pictures on page 104. Have one student read the first question. For the picture at the left, ask: What is the person building? What is the boat made of?

For the picture at the right, ask: What is this person doing? Have you ever seen a canoe? Have you ever ridden in one? Say: This kind of canoe is called a *dugout*. Why is *dugout* a good word for this?

2. *Comparing.* Have one student read the second question. Concentrating on similarities, ask: Are the people in these pictures using a natural resource that they have in their communities? Explain. Then ask: What is each person making?

Concentrating on differences, ask: How is each person dressed? How does weather affect the way people



What are the people doing?
How are the pictures alike?
How are they different?



What are the children doing?
Do you do things like this?
What?

Pictures T: children playing with wood game (Ivory Coast); B: children playing chess with wood chess set (British Columbia).

dress? How do you dress when it is raining? when the weather becomes very, very cold? How do you dress in summer? Do you think that the Ivory Coast has hotter weather than does British Columbia? Why?

Now ask: Do people in different parts of the world *like* to dress differently? How do you know?

3. *Synthesizing.* Ask: In British Columbia and the Ivory Coast, what do you think people make buildings and homes out of? Why? Bring to class books showing buildings in British Columbia and in the Ivory Coast. Have children compare building materials and architecture.

Ask: What might weather have to do with the homes people build in British Columbia? with the homes people build in the Ivory Coast? Why might people in these two places *like* to live in different kinds of homes?

Finally, ask: Why do people all over the world build houses, or shelters? Why are houses, or shelters, different in different places? (Discuss climate, natural environment, and culture.)

4. *Inferring.* Do you remember what people in cattle-raising communities do for fun? Ask: Would you expect people in British Columbia and in the Ivory Coast to have rodeos and fiestas? Why not? What do you think people might do for fun in British Columbia? in the Ivory Coast?

Explain that lumbering communities in British Columbia have timber-sawing contests, chopping contests, log-rolling contests, and parades. Ask: Why wouldn't you expect people in cattle-farming communities to do things like these?

5. *Analyzing.* Have children look at the pictures on page 105. Have one student read the first question. Ask: Why do people in different parts of the world play games? What are these games made of?

Ask a student to read the last two questions. Have the class respond.

6. *Generalizing.* Have children look again at page 105. Ask: How are the children's clothes different? Why are they different? Why do people all over the world have clothes?

Then ask: What do the homes in the top picture look like? What clue does this give about the community in which this picture was taken? Why are people's homes different? Why do all people build homes?

Lesson 3 (pages 106–107)

OBJECTIVES

Recall places they go with their own families. Interpret a picture of a family outing in British Columbia. Analyze why people in different parts of the world eat different foods. Compare foods in British Columbia and in the Ivory Coast. Compare artifacts made in British Columbia and in the Ivory Coast. Compare artifacts in these lumbering communities with statues in their own community. Generalize that although people of lumbering communities have different foods and art, they share the same needs.

LESSON UNDERSTANDING Although people of lumbering communities have different foods and art, they share the same needs.

CONCEPTS culture, environment, needs, values

MATERIALS NEEDED books showing pictures of food and food preparation in British Columbia and in the Ivory Coast

DEVELOPING THE LESSON

1. *Recalling.* Ask: Where do you go with your family? Where do you go on days your parents don't have to work? Why do people go to places like these?

2. *Interpreting.* Have children look at the pictures on page 106. Ask two students to take turns reading aloud the first two questions on the page. For the top picture, ask: Why do you think the people are doing this? Do you ever go to a park? Why? How do you feel when you are in the park? (At this point, you may want to begin Chapter Unifying Activity 1.)

3. *Analyzing.* For the bottom picture on page 106, ask: How is this place different from the stores you go to with your family? What is being sold here? Do you eat some of these things? Which ones? Would you expect people in British Columbia and in the Ivory Coast to eat the same foods? Why? Why do different foods grow in different parts of the world? Why do people like to eat different foods?

4. *Comparing.* Have students bring to class library books showing foods of the Ivory Coast and British Columbia. Ask students to compare and contrast foods and ways in which foods are prepared.



What are these people doing? Why?
Do you ever do these things with your family?



What are these objects?
 Why do you think they were made?
 How are they like statues you have seen?

Alternative Activity: If you have asked students to work on a class recipe book, have them collect and add recipes from British Columbia and the coastal areas of western Africa.

●5. *Comparing.* Have students look at the pictures on page 107. Ask: How do these objects make you feel? Do you like them? Have students take turns reading the first two questions on the page. Ask whether anyone in the class has ever seen a totem pole. Ask that person to describe it. Then have a student find on the classroom globe the coastal regions of British Columbia and southern Alaska. Explain that these places have been the home of Native Americans who once made totem poles and many other objects from wood.

Ask: What might the carvings on the totem pole in the picture mean? Discuss that totem poles stand for a family or large group of Native Americans, and that a totem is a bird, fish, or other animal that a group of Native Americans consider sacred. Have students compare the carvings with the carvings in the figure at the right to note similarities and differences.

Then pointing out the figure at the right, say: This figure is called a *mask*. What masks have you seen? Have you ever worn a mask? When? Explain that Africans have used masks as part of their religion. (At this point, you may use Chapter Unifying Activity 2.)

▲6. *Comparing.* Ask one student to read the last question on page 107. Ask: What are *statues*? If children do not know, describe statues existing in your community. Ask: Why do you think we have these statues? How are they like the objects on page 107? How are they different?

7. *Generalizing.* Ask children to briefly review pages 102–107. Ask: What is the same about people in lumbering communities in British Columbia and in the Ivory Coast? What do people in each community need? (food, clothing, shelter) Do people in each community do things for fun? Why? Do they make objects from wood? What do they make? Why? What is different about people in lumbering communities in British Columbia and in the Ivory Coast?

Unit Review (pages 108–109)

OBJECTIVES

Generalize that in lumbering communities people depend on one another, on technology, and on people in other communities; *generalize* too that people of lumbering communities have different cultures.

Valuing. Children are asked to determine whether they think trees are important to city blocks and neighborhoods.

UNIT UNDERSTANDING Although people of lumbering communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

CONCEPTS culture, environment, interdependence, needs, roles

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

MATERIALS NEEDED enough copies for the entire class of Item 11 in the Teacher's Resource Center

REVIEWING THE LESSONS

1. *Generalizing.* Pass out copies of Item 11 in the Teacher's Resource Center. Tell children that they are to write down the word that is missing in each sentence. The first letters of the words spell a word for a place where trees grow. (The words are *fire, orange, roots, elephants, saw, tree.*) If children have trouble writing the words, they may look at the drawings on the page. Children who finish rapidly may use the words they have filled in to make up their own sentences.

Have most of the class work on copies of Item 11 while you take a small group of children to one part of the classroom and review with them the pictures on pages 108 and 109. Rotate groups so all children have a chance both to work on Item 11 and to review the unit. The following are suggested questions for the pictures.

Page 108, top. Have students look at the pictures. Ask two students to



What are these people doing?
How is it alike? How is it different?



What has happened to the wood?
Why has this been done?

Review



What are the people doing?
Why is this work needed?



Why do people do things like these?

take turns reading the questions. For each picture, ask: What is happening? Why is this being done? Then ask: What will be made from the logs in the picture at the left? What will be made from the wheat?

Page 108, bottom. Have children look at the pictures. Ask a student to read the questions. Have students review (looking at pages 94 and 95, if necessary) the steps in the processing of lumber. As each step is reviewed, ask: What tool or machine is used? Who does the worker depend on? What workers depend on him or her? Who pays this worker for doing his or her job? Why do you think so? How does lumber get from sawmills to other communities? What might people in lumbering communities get from our community?

Page 109, top. Have students look at the pictures. Ask a student to read the question. For each picture, ask: What is happening? Why are trees cut down? What would happen if all the trees in a forest were cut down? Why are seedlings, or small plants, put in the ground? How else can people help to make sure that there will always be forests?

Page 109, bottom. Have students look at the pictures. Ask two children to take turns reading the questions. For each picture, ask: What is happening? Why do people do things like these? In which communities do people have rodeos? Why? What do we do for fun in our community?

Finally, ask: Do people who live in lumbering communities have the same way of life? Why do you think so? Name customs that are different. Why do people have different ways of doing things? Do people have the same needs? What are these needs?

2. *Valuing.* Divide students into small groups. Have each group select a small area of your community, or a city block on which they live, and prepare two dioramas: one showing the area without trees, and one showing the area with trees planted where students think they would look good or grow well. Have students share and discuss the finished pairs of dioramas.

Cloth-Manufacturing Communities

OVERVIEW

This unit examines cloth-manufacturing communities in India and in the United States. The first chapter in the unit, *Kinds of Clothing*, explores the clothing people wear in different cultures, different climates, and for different jobs and activities. The second chapter, *Cotton*, demonstrates how the raw material, cotton, may be converted into products. *Wool, Silk, and Synthetics* emphasizes the technology used and the great degree of specialization existing in cloth-manufacturing communities. Finally, *People of Cloth-Manufacturing Communities* illustrates cultural differences between cloth-manufacturing communities in India and in the United States.

UNIT UNDERSTANDING Although people of cloth-manufacturing communities may have different cultures, in each community people meet their needs by depending on one another, on technology, and on people in other communities.

CONCEPTS culture, environment, interdependence, needs, roles

RELATED CONCEPTS interaction, values, wants

SKILLS DEVELOPMENT

Children are given the opportunity to use map skills already introduced as well as to extend map skills through work with location, direction and distance, symbols, and legends.

Language skills are further developed through opportunities for written expression of ideas and feelings.

See Skills Symbols at the beginning of each chapter.

Kinds of Clothing

CHAPTER UNDERSTANDING

Although people dress differently, clothing is a basic human need.

CONCEPTS culture, needs, values, wants

SKILLS SYMBOLS

Activities involving map skills are designated by ● Activities involving graph, table, and chart skills are



Cloth-Manufacturing Communities

Picture man driving ox cart filled with bales of cotton.



Picture man demonstrating fabric cutter to children (New York City).

designated by ■ Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲

EVALUATION STRATEGIES

Activities 1, 2, 3, 4, and 6 in Lesson 1, and Activities 1 and 4 in Lesson 2 are especially appropriate for purposes of evaluation.

CHAPTER UNIFYING ACTIVITY

Have children draw or cut from magazines pictures of people wearing different kinds of clothing. Ask them to group and regroup pictures according to country (or culture), climate, and purpose (work, play, and so on)

INTRODUCTORY LESSON

● Have children look at the picture on page 110. Ask: Does anyone know what the white material is? Discuss, and if no one knows, explain that it is cotton. Ask: Have any of you seen cotton growing? (If so, have the child or children describe the experience.) Then ask: What is cotton used for?

Next ask: Do you think that the man in the picture lives near us? Does he live in a faraway place? Why do you think so? Have children find India on the map on page 147.

Direct children's attention to the picture on page 111. Explain that the children are looking at a machine that cuts cloth. Ask: Have you ever seen one of your parents make clothes? How did your parent cut the cloth?

Next ask: Might this picture show people who live near us? Might they live in our country? What makes you think so? Then ask children to find the boundaries of our country on the map on page 146. Ask: What do we share with people in New York City?

Finally, ask: Can anyone guess what we will be studying about next? Why is clothing important? Why do people wear clothes? Why do people in different parts of the world wear different kinds of clothing?

Lesson 1 (pages 112–113)

OBJECTIVES

Recall that clothing is a basic human need. *Hypothesize* whether people dress differently in different cultures. *Hypothesize* whether people dress differently in different climates. *Infer* from information in pictures the reasons why people wear different kinds of clothing. *Infer* from information

in additional pictures the reasons why people wear different kinds of clothing. *Generalize* that people dress differently because of cultural traditions.

LESSON UNDERSTANDING Although all people need clothing, they dress differently because of cultural traditions.

CONCEPTS culture, environment, needs, values

DEVELOPING THE LESSON

1. *Recalling.* Ask: What do people need in order to live? After children have responded, concentrate on clothing. Ask: Why do people need clothes? (Accept all responses.)

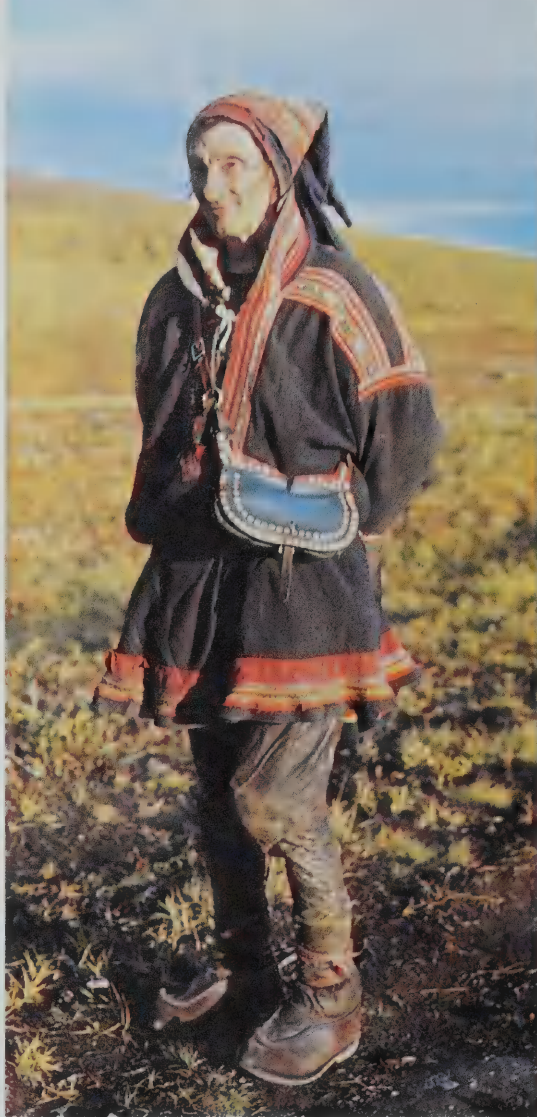
2. *Hypothesizing.* Ask: Do you dress in the same way all the time? What do you wear in the winter? What do you wear on rainy days? What do you wear in the summer? Do you think people who live in very hot places dress differently from people who live in places where the weather is cold most of the time? Why?

3. *Hypothesizing.* Say: Let's look at our clothes for a minute. We are dressed very much alike. Do you think that if we got on an airplane and went to a faraway country, the people would be dressed as we are? Why do you think so? Why do people in different parts of the world dress in different ways?

● 4. *Inferring.* Have students look at the pictures on page 112. Ask two children to take turns reading aloud the questions. Point out the man at the left. On the classroom globe, point to Finland. Ask: Where is this country? Is it near the North Pole? Would you expect Finland to have very cold weather? Why? What clue does the man's clothing give you about the weather in Finland?

Direct children's attention to the top right picture. Ask: What are these women wearing? Write *sari* on the chalkboard, and explain that a sari is a single piece of cloth that is wound around the body. Ask: Are saris different from the clothes women wear in our country? How? Are saris like some American women's clothing? How?

Have children look at the bottom right picture. Point out Bali on the classroom globe. Ask: What clues does the picture give you about the



1

What kinds of clothes do you see?
How are they different from each other?



Why might people dress in these ways?
Have you ever dressed up like this? Why?

Pictures TL: children wearing Halloween costumes (U.S.); TR: Japanese-American woman wearing a kimono (U.S.); BL: dancers in costume (Thailand); BR: Eskimo children (Alaska, U.S.).

weather in Bali? Is it cold, like Finland? Is it warm? How can you tell? Do the clothes the women are wearing look comfortable? How are they like clothes women wear in this country? How are they different?

● 5. *Inferring*. Have children look at the pictures on page 113. Ask children to take turns reading aloud the questions. Then direct the students' attention to the top left picture. Ask: How are these children dressed? Have you ever dressed up like this? When? What was your costume like? Why did you wear it? Have you worn costumes at other times? When? What were they like?

Have children look at the top right picture. Ask: How is this woman dressed? Explain that the dress is a Japanese *kimono*. Say: In the past, Japanese women wore kimonos most of the time. Today, most Japanese women dress as American women do. Why might this Japanese woman want to dress as Japanese women did in the past? Have you ever dressed as somebody did in the past? Why?

Call attention to the lower left picture. Ask: Have any of you ever danced? What did you wear? Why? Have you seen people dancing? How were they dressed? Why didn't they wear everyday clothes?

Have students look at the bottom right picture. Point out Alaska on the classroom globe. Ask: How is this country like Finland? What is it near? (the North Pole) Do you think the weather might be very cold there? Why? Ask: How is the Eskimo boy dressed? Is this a good way to dress in very cold weather? Why do you think so? (At this point, you may wish to begin the Chapter Unifying Activity.)

6. *Generalizing*. Have children review the pictures on pages 112 and 113.

For each picture, ask: Do people dress this way because it is their custom? Do people dress this way because of weather? (In many cases, the answer is both.) Then ask: Do all people who live in cold areas dress alike? Do all people who live in warm areas dress alike? How can you tell? (Have children review the pictures.) Ask: What is the main reason why people dress differently?

Alternative Activity: Have children review pages 112 and 113. For each picture, ask: Why is the person (or are the people) dressed like this?

Lesson 2 (pages 114–115)

OBJECTIVES

Recall the kinds of clothing they themselves wear at different times of day and for different activities. *Infer* from information in pictures the reasons why people wear different kinds of clothing. *Infer* from information in additional pictures why people wear different kinds of clothing. *Classify* clothing according to the purpose for which it is worn.

LESSON UNDERSTANDING People wear special clothing to perform jobs and to take part in recreation.

CONCEPTS environment, needs, roles, values

DEVELOPING THE LESSON

1. *Recalling.* Ask: Do you dress differently at different times of day? What do you wear to school? Do you wear different clothes after school? Why? What do you wear to bed at night? What do you wear when you play games? Why? (Elicit specific examples if possible.)

2. *Inferring.* Have children look at the pictures on page 114. Ask two students to take turns reading the questions. Direct children's attention to the picture at the left. Ask: What is this person doing? Why is he dressed like this? (Have children point out the purpose of various parts of the clothing and equipment.) What would happen if an astronaut wore slacks and a shirt into space? (This is a good opportunity to review Lessons 1 and 2, pages 140–142, in the student Resource Center.)

Have children look at the top right picture. Ask: What is this person doing? Why do you think so? Why might a fire fighter dress like this? How does the clothing protect the fire fighter against heat and smoke? Discuss the kind of material (asbestos), the thickness of the material, and the purpose of the head covering.

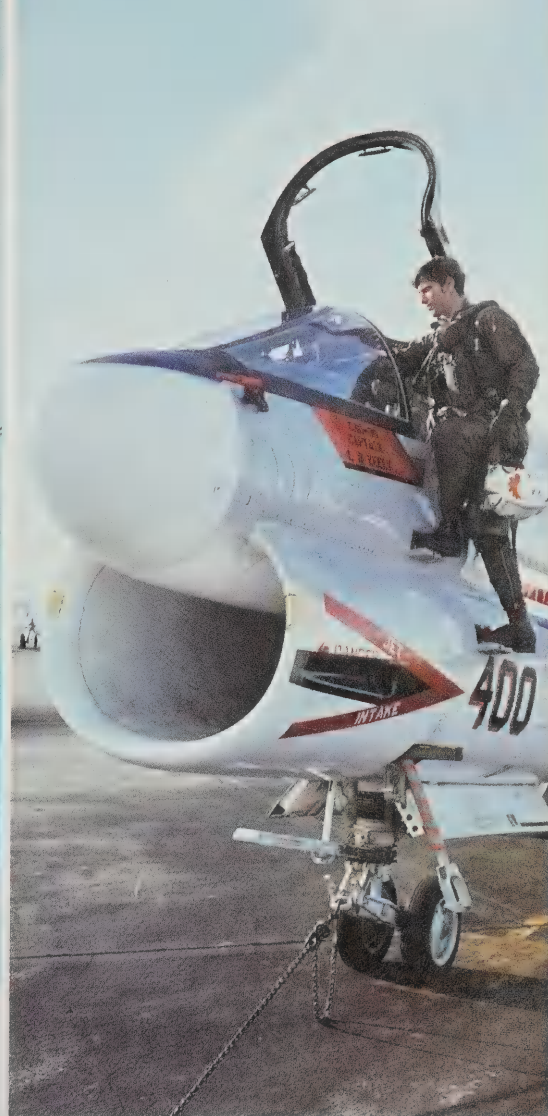
Have children look at the lower right picture. Ask: What is this girl going to do? How is she dressed? What does she have on her head? Why? Have you ever seen people dressed like this? Have children describe their experiences.

3. *Inferring.* Ask children to look at the pictures on page 115. Have one student read aloud the first question,



What is special about these clothes?
Where would these clothes be needed?

Pictures L: Edward H. White in space during the Gemini-Titan 4 space flight—White wore a specially designed spacesuit, an emergency oxygen supply chest pack, and held a self-maneuvering unit; *TR:* fire fighter (Argentina); *BR:* girl wearing rubber wetsuit (U.S.).



What kinds of clothing are shown here?
 What kinds of clothing do you wear?
 Why?

Direct children's attention to the picture at the left. Ask: What is this person doing? How is he dressed? What is he wearing on his head? Why? What is he wearing on his feet? Why? Why do people climb mountains?

Have children look at the picture at the right. Ask: What is this man's job? How can you tell? What does he wear on his head? Why does he wear special clothes to do his work?

4. *Classifying.* Have children make individual booklets of drawings of themselves in different clothing for sleep, play, school, and other purposes. Some may draw themselves in adult work clothes or clothes of other cultures. Have everyone contribute a drawing or magazine picture to a chart of special work clothes or uniforms used in your school and community.

Alternative Activity: If children's parents have jobs that require special clothing, you may invite them to class to explain the purpose of the clothing. You may also invite parents or older brothers and sisters to class to demonstrate the purpose of special sports clothing.

Cotton

CHAPTER UNDERSTANDING Because the manufacturing of cotton clothing involves technology and specialization, people of cotton-growing and cotton-manufacturing communities depend on one another and on people in other communities.

CONCEPTS interaction, interdependence, needs, roles

SKILLS SYMBOLS

Activities involving map skills are designated by ● Activities involving graph, table, and chart skills are designated by ■ Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲

EVALUATION STRATEGIES

You may use the Introductory Lesson to evaluate both the children's former learning and their ability to apply concepts to new material.

Activities 2 and 4 in Lesson 1; Activities 3 and 4 in Lesson 2; and Activities 2, 4, 5, 6, and 7 in Lesson 3 are appropriate for purposes of evaluation.

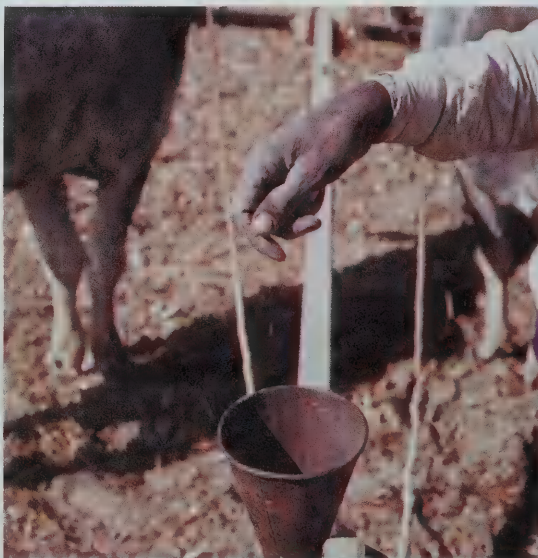
CHAPTER UNIFYING ACTIVITIES

1. Have students add life-size drawings of cotton plants to the pictures of wheat plants, cattle, and so on, begun in earlier units.
2. Have students begin a list of cotton products that begin with each letter of the alphabet. Use library books and this textbook as sources of information, and have students include items found in their environment.
- 3. Have children study Lesson 8, pages 152–153, in the student Resource Center. This lesson asks children to make a map of their own community, and it prepares them for applying map skills to material in the chapter.

INTRODUCTORY LESSON

Have students glance at the pictures on page 116. Ask one student to read the sentences. Ask: What natural resources do people need in order to grow wheat or rice? Why can't people grow wheat or rice in all parts of the world? Why can't they grow wheat or rice in the North Pole, for example?

What do you think people might need to grow cotton? Is cotton a plant, as wheat and rice are? What do plants need in order to live?



2

These people are growing cotton.
How is this like growing wheat or rice?



What job do the camels do?
What other animals help people in their work?

Lesson 1 (pages 116–117)

OBJECTIVES

Analyze how cotton is grown in India.
Compare the growing of cotton to the growing of rice.
Analyze how cotton is picked and transported in India.
Generalize that people of cotton-growing communities use technology to use their natural resources.

LESSON UNDERSTANDING Because of technology, people of cotton-growing communities can make use of their natural resources.

CONCEPTS environment, needs

DEVELOPING THE LESSON

1. *Analyzing.* Have students look at the pictures on page 116. For the top left picture, ask: What is happening? Ask students to recall other examples of plowing in the book. Ask: What animals are being used? (oxen)

For the top right picture, ask: What does the man have in his hand? What will he do with the cotton seeds?

For the bottom left picture, explain that the camel is harnessed to a water pump. The camel circles the well, raising water which spills into irrigation ditches. Ask: Why is water needed? What happens to plants that don't get enough water?

2. *Comparing.* Have small groups compare the growing of cotton with the growing of rice by comparing each picture on page 116 with each picture on page 36.

3. *Analyzing.* Ask students to look at the pictures on page 117. For the top left picture, ask: What is growing here? What is the woman doing? Explain that when cotton bolls burst open, the cotton is ready to be picked. (You may want to begin Chapter Unifying Activity 1.)

Have students look at the top right picture and then at the bottom picture on the page. Have one student read the first question. Ask: Are camels a means of transportation? Then have another student read aloud the second question on the page. (Help students to recall specific examples from the book.) Then ask: Where might people be taking the cotton? If camels and carts are used, and the people are walking, are they taking the cotton to a faraway place? (Farmers may take their crops to nearby towns for purchase by buyers representing thread and fabric mills.)

4. *Generalizing.* Have students review the pictures on pages 116 and 117. Have them point out the natural resources in each picture. For each natural resource mentioned, ask: Could cotton be grown without this natural resource? Why not? Then have students review the pictures to point out tools. For each tool mentioned, ask: How does this tool help farmers?

Lesson 2 (pages 118–119)

OBJECTIVES

Analyze how cotton is transported to and spun in a cotton mill. *Analyze* how cotton is spun and dyed. *Classify* clothes according to whether they are made of cotton. *Generalize* that people in cotton mills depend on technology, on one another, and on people in other communities.

LESSON UNDERSTANDING People in cotton mills depend on technology, on one another, and on people in other communities.

CONCEPTS interdependence, roles

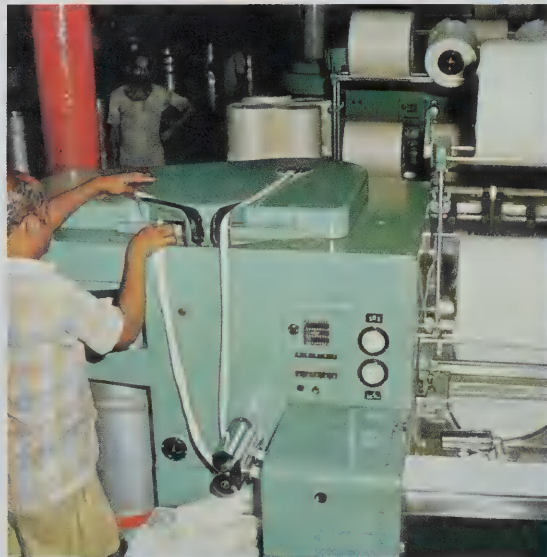
MATERIALS NEEDED absorbent cotton, coarse thread or yarn, spools of sewing thread; large yarn or ribbons, cardboard frame, construction paper, samples of woven cloth, magnifying glasses; *People, Places, Products* Media Kit (if available)

DEVELOPING THE LESSON

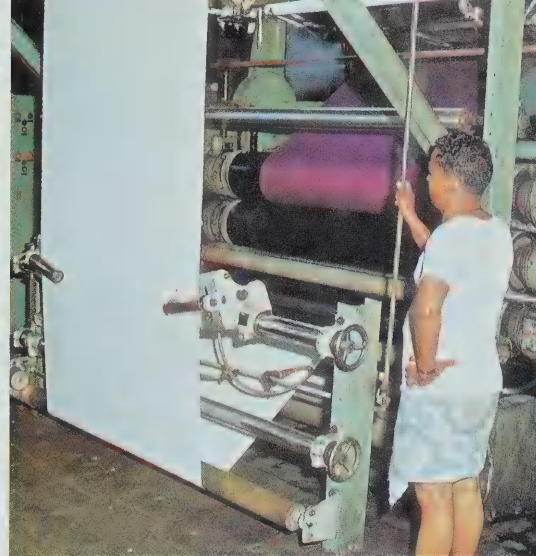
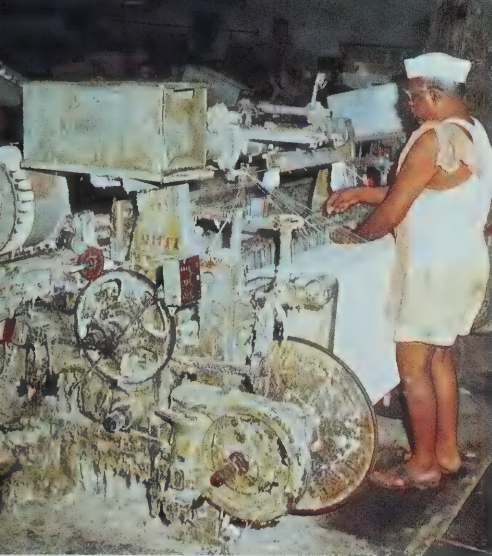
1. *Analyzing.* Have children look at the pictures on page 118. Ask two students to take turns reading the sentences on the page. Directing children's attention to the top left picture, ask: What does the cotton look like? What is happening to it? Explain that harvested cotton is packed down in layers and wrapped together in order to be easily moved.

Pointing out the top right picture, ask: What is happening to the cotton now? Where might it be? Where is wheat taken to be ground into flour? (a flour mill) Where are logs taken to be made into lumber? (a lumber mill) What do you think might happen to cotton in a cotton mill?

Have students handle absorbent cotton. Then ask them to pull the cotton apart and note the fibers. Ask: What do you do when your hair gets tangled like these fibers? Could something like this be done with cotton? Discuss that combing is a first step in making cotton cloth.



What is happening to the cotton?
What color is it?



Why are there so many colors now?
 What things are made of cotton?
 Are you wearing anything made of cotton?

Now pointing out the lower left picture, ask: What word do we use to tell about a spider making a web? Identify *spinning* as making thread and inquire how straightened cotton fibers might be made into thread or yarn. Discuss that fibers are drawn out and twisted. Have students examine coarse thread or yarn and observe how the fibers are twisted together.

Have students look at the bottom right picture. Explain that coarse thread is being spun into finer thread. Explain that as the twisted fibers come from the machine they are wound around a spool. Have students examine spools of sewing thread.

Alternative Activity: If you have the *People, Places, Products Media Kit*, have students view the filmstrip "Cotton Producing." You may use this filmstrip and the questions in the Teacher's Manual for the Media Kit instead of Activity 2.

2. *Analyzing.* Have students look at the top left picture on page 119.

Explain that the picture shows a machine weaving cloth.

Then direct children's attention to the top right picture. Ask: What color is the cloth going into the machine? What color is the cloth on the rolls as it comes out of the machine? How has the color of the cloth been changed? Have you ever dyed cloth? How did you do it? Have you ever seen anyone else dye cloth? How was it done?

Directing children's attention to the bottom left picture, ask: What is happening here? Why is this done?

Pointing out the bottom right picture, ask: What has happened to the cloth? Where might it be sent now? Are there stores that sell rolls of cloth? Why do people buy cloth? What do they make from it?

Have children check their own clothing for examples of dyed cloth, dyed woven yarn, and printed fabrics.

3. *Classifying.* Have students take turns reading the questions on page 119. Help children to name kinds of clothes that are made of cotton and to point out items of their own clothing that are made of cotton. (You may begin Chapter Unifying Activity 2.)

4. *Generalizing.* Have students review pages 116-119. Then ask: Who do all the people in a cotton mill depend on? (farmers) Who do farmers depend on? (They sell their cotton to the mill.)

Lesson 3 (pages 120–121)

OBJECTIVES

Interpret why patterns are made. *Recall* why clothing is designed and why patterns are made. *Compare* sewing and ironing in clothing factories with sewing and ironing at home. *Synthesize* information and make use of map skills to state how clothing is transported from a garment center to other communities. *Infer* why there is job specialization in the making of clothing. *Generalize* that large amounts of clothing can be made because of job specialization. *Generalize* that people who make clothing depend on technology, on one another, and on people in other communities.

LESSON UNDERSTANDING People who make clothing depend on technology, on one another, and on people in other communities.

CONCEPTS interdependence, needs, roles, wants

MATERIALS NEEDED construction paper, a dittoed pattern of a piece of clothing

DEVELOPING THE LESSON

1. *Interpreting.* Ask: What is the first thing that must be done in making cloth into clothing? Discuss that people must decide what to make. Have students observe the different clothing they are wearing. Discuss that, for each piece of clothing, someone has to decide how to make the clothing. Factors might include color, size, and style.

Distribute a sheet of construction paper, and have students fold it in half. Tell them to cut an outline for a shirt from one half. Have students compare the different sizes they produce. Then distribute a dittoed pattern to be used with the other half, and have students note the greater uniformity of the product when the pattern is used.

2. *Recalling.* Have students look at the pictures at the top of page 120. For each picture, ask: What is happening? Why is this being done?

3. *Comparing.* Have students look at the bottom pictures. Ask: Have you ever seen anyone using a sewing machine? Who? What was the person sewing? Then ask: Why is ironing necessary? Are all your clothes ironed? Discuss new improvements in



What are these workers doing?
What will happen to this clothing?

Pictures TL: man making pattern (New York City); TR: woman cutting garment pieces (New York City); BL: woman sewing garments (New York City); BR: garments being pressed (New York City).



Why do some people make clothes at home?

cloth, such as wash-and-wear fabrics. Have students discuss other improvements that may be made in fabrics in the future.

● **4. Synthesizing.** Chapter Unifying Activity 3 should be completed before this activity. Have children find New York City on the map on page 146. Then ask children to find the boundaries of our country. Ask: What do we share with people in New York City? On the classroom globe, have children find your community and its direction from New York City.

Next, have children work on and complete Lesson 9, pages 154-155, in the student Resource Center. When they are familiar with the map of New York, write "garment center" on the chalkboard. Have children define the word *garment*, and refer back to the pictures on page 120. Tell children that the garment center in New York is on Seventh Avenue, from 34th to 45th streets. Have children find this area on the map on page 155. Then have children look at the map to find ways clothes may be transported from the garment center to other communities.

5. **Inferring.** Have students look at the pictures on page 121. Have one student read aloud the question. Ask the class for responses. Then ask what is happening in each picture.

6. **Generalizing.** Ask: When people make clothes at home, does one person usually make the whole piece of clothing? How is this different from the way clothes are made in factories? Why doesn't one person make a complete dress, or pair of slacks, or shirt? Why is there specialization?

7. **Generalizing.** Have students review the pictures on pages 116-120. For each picture, ask: Who pays this person for doing this work? Where might the person live? On a farm? In a community near farmlands? In a city? Why do you think so? What might the person do with the money he or she receives? (Have children recall the basic needs.) Proceed through the pictures so that you ask the question for farmers, people who move cotton, different kinds of workers in cotton mills, and different kinds of workers in factories that make clothing.

Wool, Silk, and Synthetics

CHAPTER UNDERSTANDING Because the processing of wool, silk, and synthetics involves technology and specialization, people in communities that produce these products depend on one another and on people in other communities.

CONCEPTS interdependence, needs, roles, wants

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

The Introductory Lesson gives you an opportunity both for evaluation and diagnosis.

Activities 2, 3, 6, and 7 in Lesson 1; Activities 3 and 5 in Lesson 2; and Activities 1, 2, 3, and 5 in Lesson 3 are appropriate for evaluation.

CHAPTER UNIFYING ACTIVITY

▲ Divide children into groups to prepare illustrated charts showing how they would obtain a cotton shirt, silk scarf, wool skirt, nylon umbrella, and leather shoes from production of raw material through processing, manufacture, and sale. Have children collect swatches of different types of fabric to post on a chart with pictures or words showing how each type may be used.

INTRODUCTORY LESSON

Ask: Is all our clothing made of cotton? Have children examine what they are wearing and try to identify the materials. Then ask: Where does cotton come from? Where might other materials come from? Why?

Lesson 1 (pages 122–123)

OBJECTIVES

Infer that sheep are a source of wool. *Infer* that people need particular natural resources in order to raise sheep. *Synthesize* information obtained in this and previous lessons to describe the steps involved in processing wool into cloth. *Analyze* why people wear wool. *Classify* materials according to whether they are made of wool. *Generalize* that the



3

What do we get from sheep?



How is wool different from cotton?
What do you wear that is made of wool?

Pictures L: man herding sheep; TR: man shearing sheep (Argentina); BR: wool yardage on display in store (U.S.).

processing of wool involves technology and specialization. Generalize that there is interdependence among people in sheep-raising communities, in wool-manufacturing communities, and in other communities.

LESSON UNDERSTANDING Because of technology and job specialization, people involved in the processing of wool are interdependent.

CONCEPTS interdependence, needs, roles, wants

DEVELOPING THE LESSON

1. *Inferring.* Have children look at the picture on page 122. Ask: What are these animals called? Have one student read the question. Ask the class for responses. If children mention lamb meat, ask: What else do we get from sheep?

2. *Inferring.* Have children recall what cattle need in order to live. Ask: What do sheep need in order to live? What natural resources do you see in the picture? Do you think sheep can be raised in all parts of the world? Why not? Could cattle and sheep be raised in the same kinds of areas? Why?

● *Alternative Activity:* Have students look once again at the map of cattle-raising areas on page 149 of the student Resource Center. Ask: What is shown here? Might sheep be raised in these same areas? What do sheep need in order to live? What do cattle need in order to live?

3. *Synthesizing.* Have students look at the pictures on page 123. Directing children's attention to the picture at the left, ask: What is the man doing? Why might he be herding the sheep? Why do cowboys herd cattle? How might this man's job be like that of a cowboy? How might it be different?

Directing children's attention to the top right picture, ask: What is the man in this picture doing? What is he cutting from the sheep? What will happen to the sheep after this? Will it grow more wool? What happens to your hair after you have a haircut?

Have children look at the bottom right picture. Ask: What do you see here? How do you think the wool is made into cloth? How was cotton made into cloth? Help children to recall the steps in cotton manufacturing. Review with them cleaning, combing, spinning, and weaving. If children have difficulty remembering what happens in

each of these steps, review cotton manufacturing on pages 118 and 119. Then review page 120 so children may see how cotton cloth is made into different kinds of clothing.

4. *Analyzing.* Have two students read the questions on page 123. Ask:

Why might people wear wool in very cold weather? Say: In some areas of the world, people wear wool in very hot weather too. Do you think this is a good idea? Why? Discuss with the class that wool acts as a natural insulator, protecting the body from extremes of temperature.

5. *Classifying.* Have children touch both wool and cotton to feel the difference in texture.

▲ *Alternative Activity:* Ask children to cut from magazines pictures of wool clothing. Have them write on each picture the name of (or draw a mark by) the articles made of wool.

6. *Generalizing.* Ask: In turning wool into wool cloth, do people have special jobs? What are some of these special jobs? Do people use tools? How are the special jobs and the tools used like the jobs and the tools used in making cotton into cloth? How might they be different?

7. *Generalizing.* Ask: Where do you think sheep farms are? Are they in cities? Why do you think so? Are they in the countryside? Why do you think so? Where might wool be made into cloth? In cities? In the countryside? Why do you think so? How do people on sheep farms depend on people in cities? How do people in cities depend on people on sheep farms? How do we depend on each of these groups? What might they get from us?

Alternative Activity: Have children work on a diorama showing a sheep farm, roads and railroad, and a city. Ask: How is wool transported to cities? What happens to it there?



Lesson 2 (pages 124-125)

OBJECTIVES

Recall their own experiences with butterfly cocoons. Compare the cocoons of butterflies with those of silkworms. Synthesize information to determine how silk is processed. Analyze why there are few silk clothes. Generalize that because silk processing involves technology and specialization, people in silk-producing communities depend on one another and on people in other communities.

Silkworms spin a special thread.
Do you know what the thread is called?

Pictures TL: silkworms feeding on mulberry leaves (Thailand); TR: silkworm cocoons (Thailand); BL: cocoons being spun into thread (Thailand); BR: further spinning of thread to refine it (Thailand).



It takes a long time and many silkworms
to make one silk coat.
Why don't we wear silk clothes every day?

Pictures TL: woman spinning silk thread onto bobbins, which will be used on a loom (Thailand); TR: silk being dyed (Thailand); BL: woman weaving silk fabric (Thailand); BR: woman wearing silk blouse made in Thailand (U.S.).

LESSON UNDERSTANDING Because silk processing involves technology and specialization, people in silk-producing communities depend on one another and on people in other communities.

CONCEPTS interdependence, needs, roles, wants

MATERIALS NEEDED samples of wool and cotton; magazines (optional)

DEVELOPING THE LESSON

1. *Recalling.* Ask: Do you know of anything that spins a cocoon? Ask children who are familiar with butterflies' cocoons to describe them. *Alternative Activity:* Have a volunteer bring a butterfly cocoon to class. Someone might try to unwind carefully the thread from a cocoon.

2. *Comparing.* Have students look at the two top pictures on page 124. Ask two students to take turns reading aloud the sentences on the page. Ask: What does a silkworm look like? Does it look like other worms you have seen? What does it need in order to live? What is it eating in this picture? (mulberry leaves) Then ask: How is the silkworm's cocoon like other cocoons you have seen? How is it different?

3. *Synthesizing.* Divide the class into six groups. Assign to each group one of the pictures at the bottom of page 124 or one of the pictures on page 125. Have each group discuss what is shown in the picture assigned to them. If children have difficulty, ask them to match their picture with one of the pictures on pages 118–119. If they still have difficulty, you may help them by telling them which pictures show spinning, weaving, dying, and so on. They may then recall how that particular process is done.

Then have each group role-play the activity they have analyzed. Role-plays should take place in sequence, and the entire class should try to guess what each group is role-playing.

4. *Analyzing.* Ask two students to take turns reading the sentences on page 125. Ask: Does one silkworm spin much thread? How can you tell? Does a sheep give much more wool? Why? Why aren't there many silk clothes?

5. *Generalizing.* Ask children to return to the groups they belonged to in Activity 3. Have each group of children work together to draw a picture of the situation they

role-played. Then have the class decide how to put the completed pictures in sequence. (You may use a movie box like that shown in Item 5 of the Teacher's Resource Center.)

Tack the completed sequence of pictures to the wall (or show them on the movie box). For each picture, ask: Who pays this worker? Why do you think so? Who does this worker depend on? Who depends on the worker? What tools and machines does the worker use?

Lesson 3 (pages 126–127)

OBJECTIVES

Compare cotton, nylon, and wool cloth. Synthesize information to determine how nylon is processed. Recall the sources of cotton, wool, and nylon. Analyze why nylon is used. Generalize that because the processing of nylon involves technology and specialization, people of nylon-producing communities depend on one another and on people in other communities.

LESSON UNDERSTANDING Because the processing of nylon involves technology and specialization, people of nylon-producing communities depend on one another and on people in other communities.

CONCEPTS interdependence, needs, roles, wants

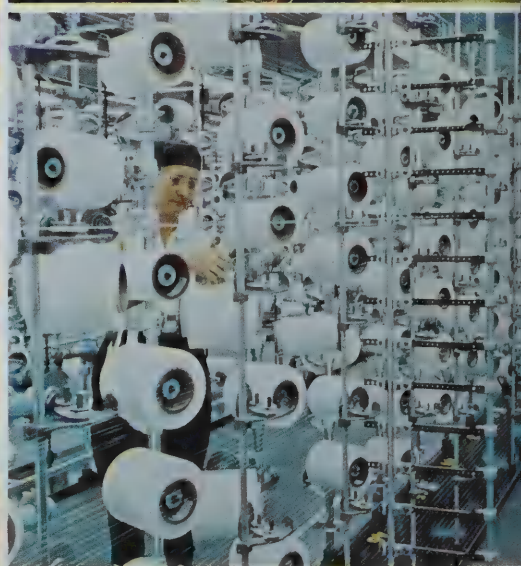
MATERIALS NEEDED samples of cotton, nylon, and wool cloth

DEVELOPING THE LESSON

1. *Comparing.* Display a piece of cotton cloth, a piece of nylon cloth, and a piece of wool cloth. Point to each material, and ask: What is this called? Have children examine and touch the materials. Ask: Which material comes from a plant? Which material comes from an animal?

Tell children that nylon is almost completely made by people. Then have children try to stretch the three pieces of material. Discuss with the children that nylon can be stretched, and yet it will return to the same shape. Ask: Why is nylon useful? How are nylon stockings better than cotton stockings?

Then discuss that nylon does not hold water. Ask: Why do people like this? Does nylon dry faster than cotton? Why do you think so?



Nylon is being made here.
How is nylon different from cotton and wool?



These things are made of nylon.
What other things can you name that are
made of nylon?

Pictures TL: girl brushing her hair with a nylon brush (U.S.); TR: parachute made of nylon (U.S.); BL: tent made of nylon (U.S.); BR: girl in sailboat—the sail is made of nylon (U.S.).

Alternative Activity: Have students soak pieces of cotton and nylon cloth of the same size in equal amounts of water. Ask them to lift the materials from the water and note which holds more water. Compare the time it takes for the two fabrics to dry.

2. *Synthesizing.* Have children look at the pictures on page 126. Ask one student to read the first sentence. For the picture at the left, explain that various materials are melted and squeezed through small holes to form nylon thread. The liquid hardens on exposure to air. Explain that the thread is pulled and stretched by machines, which makes it stronger and more elastic.

Have children look at the top right and bottom right pictures on page 126. Ask: Why do you think the nylon thread is wound onto spools? What will happen next? Have children recall what happens to cloth, wool, and silk thread.

3. *Recalling.* Ask one student to read the second sentence on page 126. List on the chalkboard these three heads: "Cotton," "Wool," and "Nylon." Point to each head, and ask: What does this material come from? Is the cloth made from it light? Is it heavy? When do people wear the clothes made from this? In the summer? Why? In the winter? Why? At all times of the year? Why?

Alternative Activity: Have blind-folded students feel samples of cotton, nylon, and wool cloth, and identify the type of cloth.

4. *Analyzing.* Have students look at the pictures on page 127. Ask one child to read the first sentence on the page. Then for each picture, ask: Why is nylon a good material for this? When you point out the parachute, explain that parachutes used to be made of silk, but almost all parachutes are now made of nylon. Ask why this might have happened. Ask why nylon would be a good material for a tent and the sail on a boat. (water resistance)

5. *Generalizing.* Ask: How is the making of nylon like the making of cotton and wool cloth? How is it different? Are the tools used to make nylon cloth like the tools used to make cotton and wool cloth? Why do you think so? What special jobs do people have? (Use the Chapter Unifying Activity.)

People of Cloth-Manufacturing Communities

CHAPTER UNDERSTANDING

Although people of cloth-manufacturing communities may have different cultures, they share the same basic needs.

CONCEPTS culture, environment, needs, values, wants

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

EVALUATION STRATEGIES

The Introductory Lesson evaluates previous learning.

Activities 2, 3, and 4 in Lesson 1; Activities 1, 2, and 5 in Lesson 2; Activities 1 and 4 in Lesson 3; and Activities 5 and 6 in Lesson 4 are especially appropriate for evaluation.

CHAPTER UNIFYING ACTIVITY

Divide the class into four groups. One group should list or draw examples of food in your community (including dishes of ethnic groups). The second group should list or draw examples of celebrations in your community (such as parades on holidays). The third group should list recreational and cultural facilities in your community. The fourth group should list examples of special buildings and notable historic or scenic sites.

INTRODUCTORY LESSON

Ask: What kind of community do we live in? Are we near a city? Or do we live in a city? How are farm communities different from cities? Which have more people—farm communities or cities? Which have tall buildings? Which have a lot of different businesses?

Lesson 1 (pages 128–129)

OBJECTIVES

Compare two pictures of cities.

Analyze why people live in cities.

Hypothesize whether cities shown are in India or in the United States.

Generalize that cities in which clothing is manufactured differ because of culture.



4

Why do people live in cities?
What do you see in these cities?
How is land used in cities?



Where are these people?
What are they doing?

Pictures T: Bombay street scene (India); B: man with garment racks in New York City (U.S.).

LESSON UNDERSTANDING Cities in which clothing is manufactured differ because of differences in culture

CONCEPTS culture, environment, interaction, values, wants

DEVELOPING THE LESSON

1. *Comparing.* Have students look at the pictures on page 128. Ask: What do you see? How are these communities different from communities in which cotton is grown? What do we call communities like these? (cities)

Have children describe experiences they have had in cities. Ask them: What kinds of homes are there in cities? Why? What kinds of stores are there in cities? Why would there be many stores? What can people do for fun in cities? What kinds of jobs do people have? How do people get from one part of a city to another? Then ask children to draw or cut from magazines pictures of what they like most to do in a city.

2. *Analyzing.* Have students work in small groups. In each group, children should read the questions on page 128, and write, draw, or cut from magazines pictures that answer the questions. Have groups share completed materials in class.

●3. *Hypothesizing.* Have children look once again at the pictures on page 128. Ask: Can you tell which city is in our country and which city is in India? Then point out India on the classroom globe, and explain that the city in the top picture is in that country and the city in the bottom picture is in the United States. Ask: How are the cities alike? How are they different? Why might a city in India look different from a city in the United States?

4. *Generalizing.* Have students look at the pictures on page 129. Explain that clothing is made in each of these cities. Ask two children to take turns reading aloud the questions. Ask: Which picture shows a city in India? Which picture shows a city in our country? How can you tell?

Ask: How are these cities alike? How are they different? Discuss with children buildings, the way people are dressed, and so on. Then ask: How are the customs of the people in the top picture different from the customs of people in our country? Why might two cities in which cloth is made be different from each other?

Lesson 2 (pages 130–131)

OBJECTIVES

Hypothesize whether pictures show people in India or in the United States. *Contrast* foods in India and in the United States. *Contrast* reasons for taking part in an activity in two different cultures. *Generalize* that in cloth-manufacturing communities people meet their needs for food and clothing in different ways because of differences in resources and customs.

Valuing. Children are asked to describe what they like to make with their hands and what feeling this gives them.

LESSON UNDERSTANDING In cloth-manufacturing communities, people meet their needs for food and clothing in different ways because of differences in resources and customs.

CONCEPTS culture, environment, needs, values, wants

MATERIALS NEEDED curry powder, large pieces of fireproof crepe paper or bedsheets, records of traditional Indian music (all optional); yarn, ribbon, and fabric strips

DEVELOPING THE LESSON

1. *Hypothesizing.* Have students look at the pictures on page 130. Ask: Which picture shows people in India? Which shows people in the United States? How can you tell?

2. *Contrasting.* Have one student read aloud the first question on page 130. Ask the class to respond. Then have children flip back through the book, pointing to various kinds of clothing.

Have one student read aloud the second question on the page. Ask the class to respond. Ask: How are the foods different? How are the ways people eat different? Again, have children flip back through the book to find examples of various foods and ways of eating. (At this point, you may want to begin the Chapter Unifying Activity.)

Alternative Activity: Bring to class some curry powder and some bedsheets or fireproof crepe paper. Make simple saris and turbans by wrapping the cloth around students. Have all students smell the curry powder. Play records of traditional Indian music. Ask children how they like the smell of the curry and whether they enjoy the music. Encourage them



Why do people around the world wear different clothes?

Why do they eat different foods?



What are these people doing?
Is this done often today? Why?

to imagine themselves as and to feel part of another culture

3. *Contrasting.* Have children look at the pictures on page 131. Have one student read the first question. Ask the class for responses. Then have children recall their own simulation of weaving in a previous lesson. Have students take turns reading the last questions. Ask: Why do people weave? Why are big machines often used for weaving today?

Ask: Why might the woman in the picture at the left do her own weaving rather than buying cloth at a store? Discuss with the children that many people cannot afford to buy their own cloth because they are poor. Also discuss that the woman in the picture might not live near a store.

Then ask: Why do you think the girl is weaving? Do you think she is weaving for the same reason as the woman? Why would people weave even if they could afford to go to a store to buy cloth or clothing? Might weaving be fun? Is it something you would like to try? Why or why not?

Encourage children to weave simple mats, belts, or scarves of yarn, ribbon, and fabric strips.

4. *Valuing.* Have children name things they like to make with their hands.

Ask: Why do you like to make things? Are they pretty? useful? How do you feel when you have finished making something? If you wish, you may ask children to bring to class and share items they have made.

5. *Generalizing.* Have students review the pictures on pages 130 and 131.

Ask: What pictures show people meeting needs? What are these needs? (food, clothing) How do the ways people meet needs differ?

Lesson 3 (pages 132–133)

OBJECTIVES

Analyze why people engage in particular activities. Compare recreation in India and in the United States. Generalize that there are similarities and differences in the recreational activities of people in cloth-manufacturing communities.

Valuing. Children are asked to express what they like to do with other people and what they like to do alone.

LESSON UNDERSTANDING There are similarities and differences in the recreation of people in cloth-manufacturing communities.

CONCEPTS culture, interaction, needs, values, wants

DEVELOPING THE LESSON

1. **Analyzing.** Have children look at the pictures on page 132. Have two students take turns reading the questions. Directing children's attention to the top picture, ask: Why do people go to this place? How is this like places you go with your parents? How is it different?

Directing children's attention to the bottom picture, ask: What do you see here? Have you ever been to a parade? Why do people go to parades? Where do you think this parade is? Is it in a city? How can you tell? Is it in the United States? What makes you think so?

2. **Comparing.** Ask students to look at the pictures on page 133. Calling attention to the top picture, ask: What is happening? Where do you think these people are? In what country? Why? Do people in our country do things like this? Why? Have you ever done anything like this? Have children describe their experiences at parks or riding horses.

Directing children's attention to the bottom picture, ask: What are the people doing? Why do people do things like this? Have you ever done anything like this? What? Would you like to?

▲ 3. **Valuing.** Have students take turns reading the questions on page 133. Have students draw two pictures: one showing something they like to do with other people and the other showing something they like to do by themselves. Ask students to show in their drawings how they feel. Then



What is happening in these places?
Why do people come here?



How do people enjoy themselves?
 What do you like to do with other people?
 What do you like to do by yourself?

have each student write a sentence under each picture explaining how this activity makes them feel. Students' sentences should read something like this: "When I _____, I feel _____."

Alternative Activity: If there is time left in the school year, obtain the addresses of teachers and classes in schools in India. Have students compose a class letter describing some of the things they enjoy doing. Have them ask the Indian students to respond, telling what they enjoy doing.

4. *Generalizing:* Have students review the pictures on pages 132 and 133. Ask: What are the people doing? Why do people in different countries do different things when they have fun? Why do they do some of the same things when they have fun?

Lesson 4 (pages 134–135)

OBJECTIVES

Interpret why people listen to music and look at art. *Analyze* why there are different kinds of buildings in different cultures. *Analyze* particular buildings in your community. *Synthesize* information to understand how people live in an Indian village, an Indian city, and in your own community.

Generalize that people of cloth-manufacturing communities have different music, art, and architecture.

Valuing. Children are asked to determine what they would like to share with an Indian child.

LESSON UNDERSTANDING People of cloth-manufacturing communities have different music, art, and architecture.

CONCEPTS culture, interaction, needs, values, wants

DEVELOPING THE LESSON

1. *Interpreting.* Have the class look at the pictures on page 134. Have students take turns reading aloud the questions. For the top picture, ask: How is music a way of sharing? Why do people all over the world like music? How do you feel when you hear music? What kind of music makes you happy? sad? Do you share music with your friends and family? How?

Directing attention to the bottom picture, ask: How are paintings shared? Why do people like to look at art? How does drawing make you feel? Do you like to look at other people's drawings? Why? Do you like to show your drawings to others?

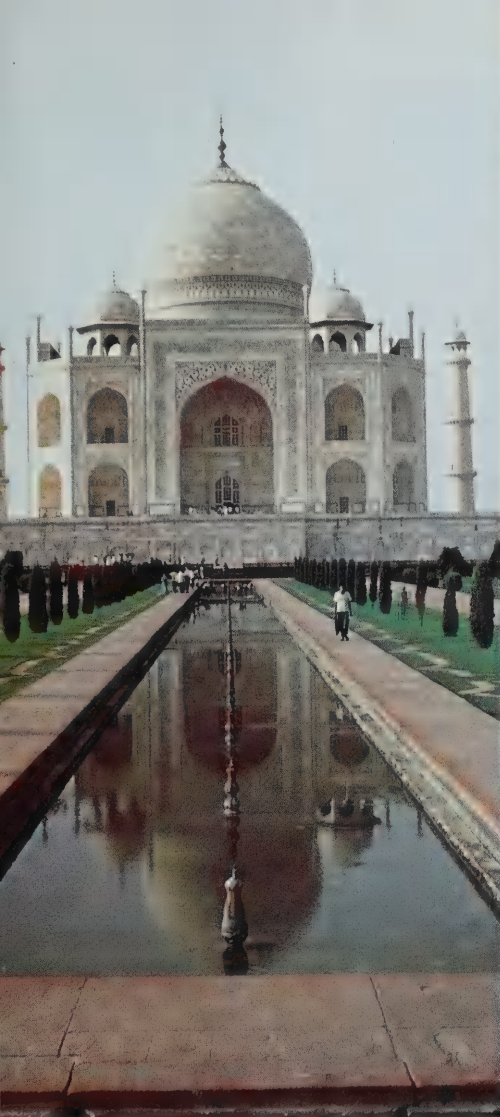
Alternative Activity: You may extend the main activity by having children recall the meaning of the word *taxes*. Ask: Why are taxes sometimes used to pay for places where people can go to hear music? Why are they used for places where people can go to look at art? Why is everyone in a community willing to share so communities can have places like these?

▲2. *Valuing.* Ask students to determine one thing they would like to share with a child in India. Have them draw a picture or write a sentence describing it. Then ask the class: What would you like Indian children to share with you?

3. *Analyzing.* Ask students to look at the pictures on page 135. Have



What things do all people share?
What things would you like to share with
someone from another country?



The Taj Mahal is in India. The Washington Monument is in Washington, D.C.
Do you know why they are famous?

students take turns reading aloud the sentences. Direct children's attention to the picture at the left. Explain that the Taj Mahal was built long ago in India in memory of a queen called Mahal. Ask: Why would a building be named for someone? What do you think of this building? Do you find it beautiful? Do you think it is very large? How can you tell?

Now direct children's attention to the picture at the right. Say: This building was named after George Washington, the first president of our country. Do you know what a *president* is? Why might a building be named after the person who was our first president? What do you think of this building? Is it beautiful? Is it very large? How can you tell? (Explain that it is an observation tower.) Then ask: How are the two buildings alike? How are they different?

4. *Analyzing.* Take students to observe the styles and types of buildings in your neighborhood or community. Have them draw pictures of some that particularly interest them, encouraging careful observation of building size, materials, overall design, and decorative details. Have students make photographic records of important, unusual, and typical buildings.

When you return to the classroom, discuss how the purposes of a building affects its size and appearance. If any buildings utilize design elements from other cultures, help students to identify the sources.

5. *Synthesizing.* Have students work in groups to develop cooperative stories describing what a child living in an Indian village, in an Indian city, or in their community, would see and do on a typical day. Encourage as much detail as possible.

6. *Generalizing.* Have children review pages 134 and 135. Ask: How are these pictures alike? How are they different? Do people everywhere have music? Is music the same around the world? Do people everywhere have art? Is art the same around the world? Are there buildings in all countries? Are they different? Why?

OBJECTIVES

Synthesize information to answer questions about pictures. *Synthesize* information to participate in a class “clothes day.” *Synthesize* information to complete the model of their own community. *Synthesize* information to answer questions about and interpret a community map. *Generalize* that although people of cloth-manufacturing communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

UNIT UNDERSTANDING Although people of cloth-manufacturing communities may have different cultures, in each community people meet their needs by depending on technology, on one another, and on people in other communities.

CONCEPTS culture, environment, interdependence, needs, roles

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

REVIEWING THE LESSONS

1. *Synthesizing*. Review with small groups of students pages 136–137.

Page 136, top pictures. Have one student read the question. Ask for responses. Then have children name as many different kinds of clothing as they can. Ask where or why each kind of clothing is worn.

Page 136, bottom pictures. Have one student read the question. Ask for responses. Also ask: What are the workers (is the worker) doing? Who pays them for their work? What tools do they use in their work?

Page 137, top pictures. Have students take turns reading the questions. Ask for responses. Ask: Why is each kind of work done? What products are made from each of these animals? What do these animals need in order to live? Do they need the same things? Why do you think so?

Page 137, bottom pictures. Ask one student to read the question. Ask for

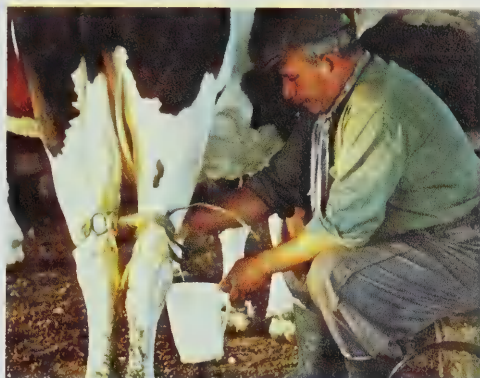


Why do people wear different kinds of clothing?



How does this work help other people?

Review



How is their work alike?
How is it different?



What do people in these communities share?

responses. Ask: What is a *community*? What kinds of communities are these? Are they farm communities? cities? How can you tell? Why do people in communities pay taxes? What are taxes used for? (Ask for specific examples.) How do people receive money in communities? What do they use their money for? How are people in communities around the world alike? How are they different?

2. *Synthesizing*. Have a "clothes day" on which students show garments they enjoy wearing or traditional clothing worn in the countries or cultures of their ancestors' origins. Encourage discussion of cloth, color, style, and occasions when the garments are worn.

●3. *Synthesizing*. Have students complete the model of their community. Then ask them to suggest ways they might organize and display various materials to tell a story about their community. Have the class carry out suggestions, and invite visitors or other classes to see the results.

If students have not yet worked on a map of their community, you might have them do so now. Have them use the model of their community and Lesson 8, pages 152–153, in the student Resource Center

●4. *Synthesizing*. Use Lesson 10, pages 156–157, in the student Resource Center to review and extend map skills.

▲5. *Generalizing*. Have each student write or give an oral response to each of the following questions: What can you say about natural resources around the world? What can you say about the kinds of work done by people around the world? What can you say about tools used by people in different jobs? What can you say about the way people of different communities depend on one another? What can you say about homes around the world? about clothing around the world? about food around the world?



Resource Center

Resource Center

SKILLS SYMBOLS

Activities involving map skills are designated by ●. Activities involving graph, table, and chart skills are designated by ■. Activities involving reading readiness, vocabulary development, and other language skills are designated by ▲.

Lesson 1 (pages 140–141)

This lesson should be used before the first unit, entitled Fishing.

OBJECTIVES

Observe photographs of people in space. Define the earth as the home of people. Infer that on earth people are able to meet their basic needs. Interpret what astronauts need. Generalize that earth is the home of people.

LESSON UNDERSTANDING Earth is the home of people.

CONCEPTS environment, needs, space

DEVELOPING THE LESSON

●1. *Observing.* Have students look at each picture on page 140. For each picture, ask: What do you see? What is happening? What story do all these pictures tell?

●2. *Defining.* Have students look at the picture on page 141. Ask: Where is the astronaut? What makes you think so? Ask: Where do all people live? If possible, have every student write out his or her answer, or call on each one for an oral response. If students mention only the name of their community, ask whether there are other names for larger areas. Ask: If you went to a faraway land, where would you say you were from? If you visited the moon, where would you say you were from?

Discuss with students that the earth is the home of people. Write this on the chalkboard.

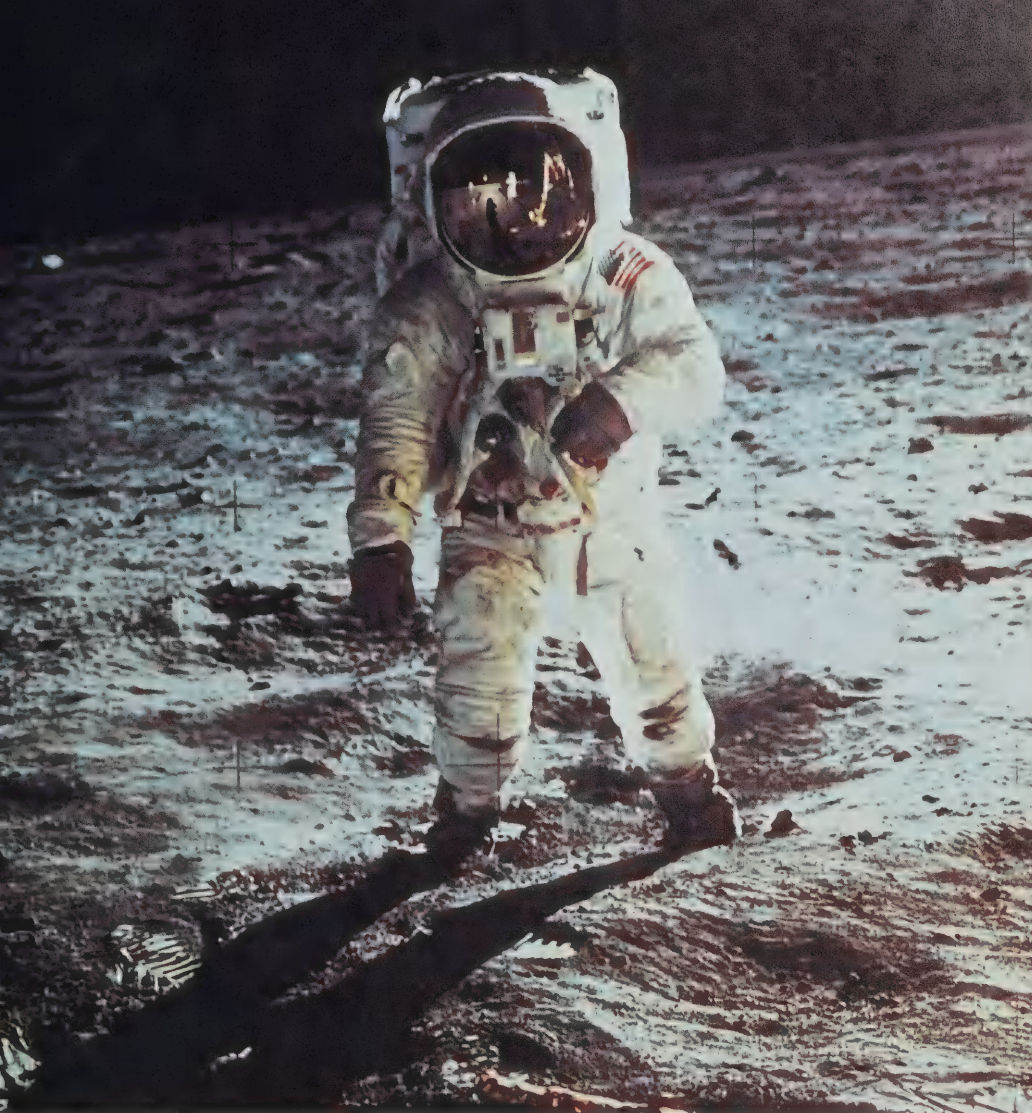
●3. *Inferring.* Have students review the pictures on pages 140 and 141. Help students to identify items that fulfill needs for air and water and meet basic needs for food, clothing, and shelter. Lead students to understand that astronauts must bring equipment from home—their earth-home.

Ask: Why do people need air? How do they get it? Why do we need water? How do we use it? How do we



1

Pictures TL: Saturn space vehicle carrying Apollo 7 astronauts; TR: Apollo 11 space flight to the moon; BL: Apollo 11 lunar module ascent stage—the earth rises above the lunar horizon; BR: astronaut Edwin E. Aldrin, Jr. descending the steps of the lunar module ladder as he prepares to walk on the moon.



Picture astronaut Edwin E. Aldrin, Jr. walking near the lunar module during Apollo 11 extravehicular activity.

get it? What else do we need from the earth?

To dramatize people's dependence on the resources of the earth, ask: What would happen if an astronaut stepped out onto the moon in everyday clothing?

4. *Interpreting.* Have students make costumes for themselves, or make hand or stick puppets. Ask them to include the equipment needed by astronauts. Have students explain the purpose of each item. They should include ways in which the equipment is used, with emphasis on people's basic needs and ways of surviving in space environments.

Alternative Activity: Have students cut, collect, and arrange pictures of space travel from newspapers and magazines. The display may be added to and changed throughout the school year.

●5. *Generalizing.* Say: There are no living things on the moon. But pretend there were moon creatures that could talk to people. If you visited the moon and a moon creature asked where you lived, what would you say? What would you tell the moon creature about the earth?

Lesson 2 (page 142)

This lesson should be used before the first unit, entitled Fishing.

OBJECTIVES

Define the word *round*. Classify the earth and other objects according to shape. Analyze why only part of the earth can be viewed at one time. Recall that the earth is round.

LESSON UNDERSTANDING The earth is round (or a sphere).

CONCEPTS environment, space

MATERIALS NEEDED balls of different sizes, colored paper

DEVELOPING THE LESSON

▲ 1. *Defining.* Have students look at the picture on page 142. Ask: What do you see? What is this called? (the earth) What shape is the earth? Ask students to draw on pieces of paper the shape they think is most like the earth.

Then say: The earth is not just a circle. Display balls of different sizes and materials. Have children handle the balls. Ask: What shape are these balls? Help children to define the word *round*. Then ask: What else is round? Have children name as many round things as they can (oranges, balloons, and so on).

● 2. *Classifying.* Ask children if they have ridden in an airplane. Discuss the colors they saw on earth from the plane. Then direct children's attention once again to the picture on page 142. Ask: What colors do you see in the picture? What might the white be? (clouds) What might blue be? What large blue areas have you seen on earth? Have you ever seen an ocean? What is an ocean? What might the brown areas be? What is brown on earth? (land areas)

● 3. *Analyzing.* Ask: How much of the earth is shown in this picture? Can anyone—even an astronaut—see all of the earth at one time? Why? To help children understand, hold up a large ball. Attach to one half of the ball a piece of colored paper. Hold up the ball so children see the side with the colored paper. Say: What do you see? Then turn the ball so the other side is showing. Ask: What do you see? Why can't you see the side you saw before? How is the earth like this ball?

● 4. *Recalling.* Ask: What shape is the earth?



2

Picture a view of the earth from 22,300 miles in space (shown are portions of North and South America, Africa, Europe, and the Greenland icecap; Antarctica is blanketed under cloud cover).



3

Lesson 3 (page 143)

This lesson should be used before the first unit, Fishing.

OBJECTIVES

Hypothesize that globes represent the earth. *Define* the word *model*. *Generalize* that a globe is a model of the earth.

LESSON UNDERSTANDING A globe is a model of the earth.

CONCEPTS environment, space

MATERIALS NEEDED classroom globe

DEVELOPING THE LESSON

● 1. *Hypothesizing.* Display the classroom globe in a prominent place. Then have children look once again at the picture on page 142. Ask: What in our classroom is the same shape as the earth? Have students look around the classroom until they point out the globe. Discuss with the children how the classroom globe is the same shape as the earth. Ask: What is a globe used for?

2. *Defining.* Ask: What do we call a small copy of an airplane that looks just like a real airplane? Discuss with the children other kinds of models: model cars and planes, dolls, doll houses, animal figures, and so on. Have students compare models with real objects in terms of size, use, and appearance. (If possible, have examples of such items in the classroom.)

To help students relate direct observations to the roundness of the earth, have them come up to the globe to see that the portion they can view from an inch away appears flat, but the curved shape can be seen as one moves farther away from the surface.

● 3. *Generalizing.* Have students look once again at the photograph of the earth on page 142. Ask: Do you remember what the blue areas are? What are they? Point to the globe. Ask: What does blue stand for on the globe? Pointing to the photograph again, ask: What are the brown and green areas on the globe? Ask: Why aren't clouds shown on the globe?

Ask: Is a globe a model of the earth? How can you tell?

Lesson 4 (pages 144–145)

This lesson should be used before the first unit, Fishing.

OBJECTIVES

Analyze why there are periods of daylight and darkness on earth. *Infer* that a particular city is in daylight when the earth is turned toward the sun and that it is in darkness when the earth is turned away from the sun. *Define* the word *pole* and the directions *north*, *south*, *east*, and *west*. *Analyze* how the earth orbits the sun. *Generalize* that the earth's rotation on its axis causes day and night and that the earth orbits the sun once a year.

LESSON UNDERSTANDING Day and night are caused by the earth's rotation on its axis. There are four main directions: north, south, east, and west. The earth makes a complete orbit of the sun in a year.

CONCEPTS change, environment, space, time

MATERIALS NEEDED an exposed light bulb, classroom globe; small paper figures; a small wheel with an axle or a cardboard circle with a round stick through the center

DEVELOPING THE LESSON

●1. *Analyzing*. Have students look at the pictures on page 144. Explain that the light bulb stands for the sun, and the globe for the earth. Ask one student to hold the classroom globe to an exposed light bulb. Have the student turn the globe slowly, in an easterly (counterclockwise) direction. As the student turns the globe, ask: Why is it dark on this part of the globe? Why is it light here?

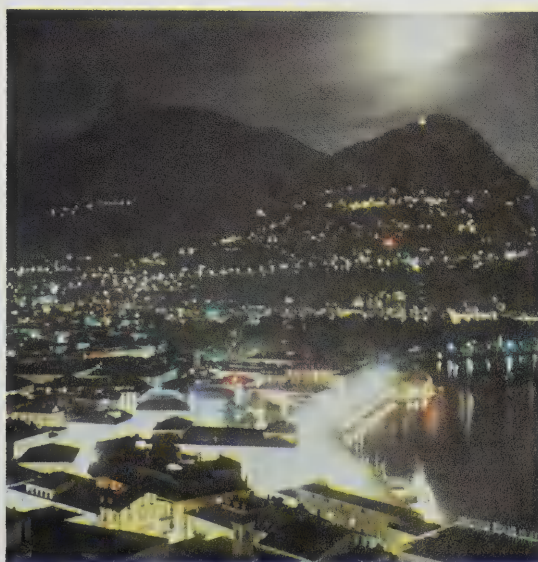
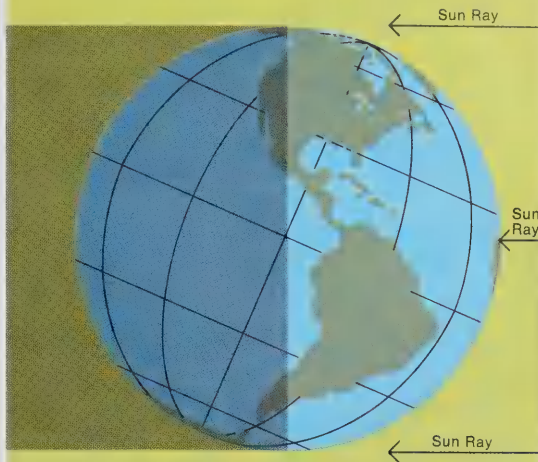
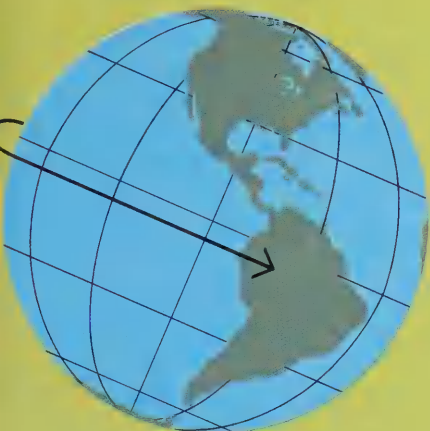
Assign to groups of students small paper figures. Have one group tape its figure to the location of your community on the globe. Have other groups tape their figures to places in other countries (not at the poles). Have a student turn the globe. As the globe is turned, have each group tell when their figure is experiencing daytime and darkness.

●2. *Inferring*. Have students look at page 145. Direct attention to the map and picture at the left. Ask: What does the arrow show? How is the earth turning?

For the map at the right, ask: What part of the earth is turned away from



4



Pictures TL: globe showing direction in which the earth rotates; TR: globe showing most of the Western Hemisphere in daylight; BL: view of Lugano in daylight (Switzerland); BR: view of Lugano at night (Switzerland).

the sun? Is it a part shown in the picture below? How can you tell?

●3. *Defining.* Using a small wheel with an axle or a cardboard circle with a round stick through the center, have students examine how a wheel turns around its central point. Then have students tape small paper figures to the globe for Activity 1 travel in a circle while the two new figures simply turn in place. Have students add additional figures to the globe to see whether there are any points around which the globe seems to turn. Explain that *pole* means "end." Point out the poles.

Ask students to demonstrate direction toward the north from different points on the globe, and have them state that they are moving toward the North Pole. Do the same for south. (Do not permit children to use "up" and "down" to describe north and south. If they do so, illustrate "up" by pointing outward from the center of the globe, as an astronaut would travel from earth.)

Have students face east. Ask: Where is north? south? Label classroom walls facing in these directions with the letters *N* and *S*. Have one student again rotate the globe. Explain that the globe is turning toward the east. Place the letter *E* on the wall facing east. Then label the wall facing west.

Have students take turns walking toward various walls, and saying, "I am walking _____." (north, south, east, west) Have students take turns placing an object on any spot on the globe and directing someone else to move it east, west, and so on.

●4. *Analyzing.* Use the light bulb and globe to demonstrate the earth's orbit around the sun. Have one student, turning the globe in an easterly direction, move around the light bulb.

Ask: How long does it take the earth to move once around the sun? Show all the days on a year's calendar. Say: There are 365 days here.

●5. *Generalizing.* Ask: How does the earth turn round and round? Have one student demonstrate the earth turning on its axis. Ask: What causes daylight and nighttime? How does the earth move around the sun? Have a student demonstrate this. Ask: How long does it take for the earth to move once around the sun?

Lesson 5 (pages 146-149)

This lesson should be used before the first unit, entitled Fishing.

OBJECTIVES

Synthesize information to determine how countries are shown on maps.

Classify colors as symbols. *Analyze*

why there is distortion on flat maps of the world. *Analyze* why mapmakers make flat maps. *Define* the word *symbol*. *Recall* why people make flat maps and recall why there are symbols on maps.

LESSON UNDERSTANDING Flat maps can show the entire earth. Symbols are used to represent things on maps.

CONCEPTS environment, space

MATERIALS NEEDED an orange and a knife for peeling it

DEVELOPING THE LESSON

● 1. *Synthesizing*. Have students look at the pictures on pages 146 and 147. Ask: What do these pictures show? What do we call a model of the earth? Then ask why there is the color blue on each globe. Ask: What does the blue stand for? Why do you think so?

Direct children's attention to the globe at the top of page 146. Call children's attention to the gray and red colors. Then ask: What is a *country*? Discuss with the class that people have divided up the land areas of the earth into countries. Explain that countries cannot be seen on earth as can oceans and large land areas. Countries are what people decide they are. They are made up of people who have the same leaders, often share the same language, have a common past, and a common way of life. Ask: What is the name of our country? What color is it on the globe in the picture?

Say: The gray shows Canada. Is Canada a country? How can you tell from looking at the globe? Have children trace with their fingers the boundaries of Canada. Ask: Why do people put different colors on globes for different countries? Is this because the land on earth is colored differently? Why might people who look at globes want to know where countries are?

Have students compare the colors of the United States and Canada in these pictures with the colors of the same countries on your classroom



5



Pictures T: globe showing India, Thailand, and Japan; B: globe showing the Ivory Coast and Norway.

globe. Ask: Does it matter what color a country is? Why not? Why are oceans always blue?

●2. *Classifying.* Have children examine the picture at the right on page 146 and the pictures on page 147. Call out the names of countries, and see whether children can tell what color each country is. Then have children trace with their fingers the boundaries of countries on your classroom globe.

●3. *Analyzing.* Have children look at the maps on pages 148 and 149. Ask: How are these maps different from globes? How does the earth look on these maps? Does it look round? flat?

In a central location in the classroom, peel an orange in curved strips so the peel is left entirely in one piece. Then try to flatten the peeled orange, and have children look at it closely. Ask: What has happened to the orange? Might mapmakers do something like this to make flat maps of the earth? Call children's attention to the places where the orange peel has twisted, flattened, and torn. See whether children can compare this with the distortion (especially at the north) of land areas on the maps on pages 148 and 149.

Ask: If we peeled only a small part of an orange, would there be less stretching? Show students flat maps of small areas.

●4. *Analyzing.* Ask: Why do people make flat maps of the earth? Have students compare what is shown on the maps on pages 148 and 149 with what is shown on the classroom globe. Ask: How much can you see at one time on the classroom globe? Why? How much can you see at one time on the flat map?

●5. *Defining.* Direct children's attention to the top map on page 148. Ask children to find the green areas on the map. Then ask what green might stand for. Call attention to the word "Fish" at the bottom left corner of the map. Ask: Why is there a green square by the word? How does that help us to read the map?

Taking the maps on pages 148 and 149 one at a time, ask: What colors do you see on the map? What does the color (name the color) stand for? How can you tell?

Write the word *symbol* on the chalkboard. Say: A *symbol* is something that stands for something

else, Discuss symbols, such as stars given for good work in school, flags of countries, and so on. Then say: What is a stoplight? What must cars do when a light turns red? green? Is the color red a symbol? What does it mean? Is the color green a symbol? What does it mean? Direct children's attention once again to the maps on pages 148 and 149. Ask: Is pink a symbol on one of these maps? What does it stand for? How do you know?

Point out other colors, asking the same kinds of question.

- 6. *Recalling.* Why do people make globes? Why do they make flat maps? Why do they use symbols on maps?

WORLD FISHING AREAS

 Fish



WORLD WHEAT AND RICE AREAS

 Wheat

 Rice



Pictures T: map showing world cattle-raising areas and the United States and Argentina;
 B: map showing world forest areas and British Columbia, the Ivory Coast, and Thailand.

Lesson 6 (page 150)

This lesson should be used before the chapter Lumber Processing in the unit entitled Lumbering.

OBJECTIVES

Hypothesize how they themselves might show what was in their homes. *Infer* that maps reflect the perspective of someone who is looking down on an area from a high place. *Synthesize* information to determine that maps show the location of objects and their relative size. *Synthesize* information to make a map of their classroom.

LESSON UNDERSTANDING Maps show the relative size of objects.

CONCEPTS space

MATERIALS NEEDED square blocks

DEVELOPING THE LESSON

● 1. *Hypothesizing.* Have children look at page 150. Direct attention to the top picture. Ask: What is this? How can you tell? Suppose you wanted to show on paper what was in your house. How could you show this? Have children discuss different ways. Ask: Could you draw a map? If you did, what would you have to do? Could you show each room in your house the size it is? Why not?

● 2. *Inferring.* Have students stand up and look down at the tops of blocks. Ask how the blocks look from this viewpoint and what the children can see. Then have students imagine that they are standing on the roof of your school. Ask: How does our classroom look from where you are standing? If you made a map of our school when you were standing on the roof, what would the map look like?

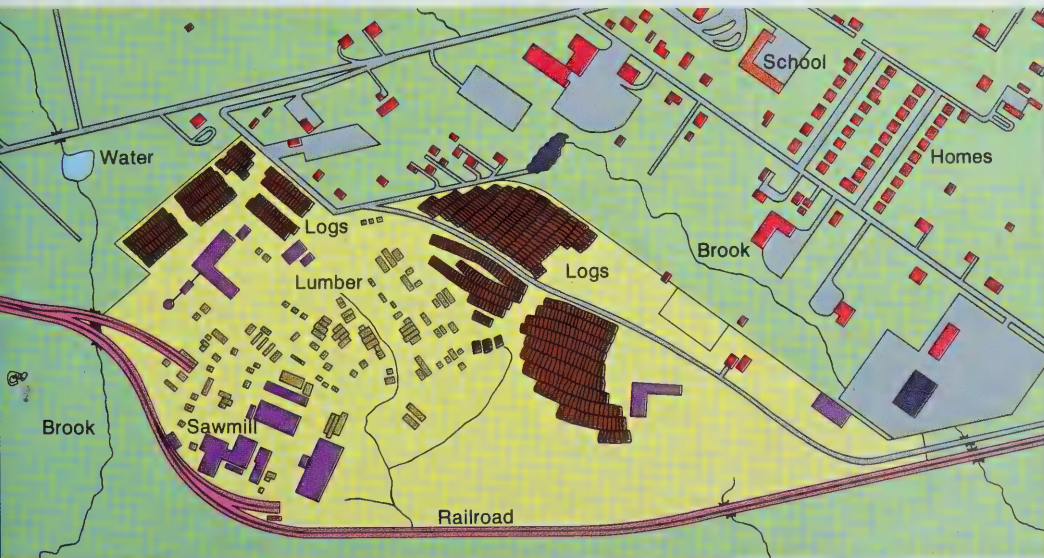
3. *Synthesizing.* Have students look at the floor plan on page 150. Ask: Why did the person who made this map make some rooms larger than others?

Call out colors, and ask what room or rooms are that color. Ask, for example: What might the blue room be? If children have difficulty answering, ask the opposite kind of question. Say, for example: I see a kitchen. What color might it be on the map? Why do you think so?

● 4. *Synthesizing.* Have children draw similar maps (or floor plans) of their classroom. Ask why they should make tables larger than desks, and so on.



6



7

Lesson 7 (page 151)

This lesson correlates with Lesson 2, pages 95–97, in the chapter entitled Lumber Processing.

OBJECTIVES

Recall how objects on the ground look from an airplane. *Compare* a photograph of a community with a map of the same community. *Classify* symbols on the map. *Analyze* how people in the community shown get from one place to another. *Synthesize* information to explain the purpose for the location of objects on the map. *Generalize* that maps show location.

LESSON UNDERSTANDING Maps show location.

CONCEPTS interdependence, space

DEVELOPING THE LESSON

1. *Recalling.* Have children look at the top picture on page 151. Ask: Where was the person who took this picture? How can you tell? Have you ever ridden in an airplane? How did things on the ground look?

● 2. *Comparing.* Ask children to look at the map on page 151. Ask: What does this show? How is it like the picture above? How is it different?

● 3. *Classifying.* Ask children to read, at random, words on the map. As each child reads a word, ask what on the map illustrates this word. For example, if a child reads "logs," ask: Do you see drawings of logs on the map? Where are they? Have them locate each item on the photograph as well.

Review with children the word *symbol*. Ask: Are the drawings of logs symbols? Why?

● 4. *Analyzing.* Now ask children how people may get from one place to another in the community shown on the map. Do not use cardinal directions at this point, but simply have the children trace routes with their fingers.

● 5. *Synthesizing.* Ask: Why is the school in this community near the homes? Why isn't it near the sawmill? Why is the sawmill near the logs? Why is there a train track going by the sawmill? Why didn't people build the railroad so it goes past the school? Why is the sawmill near water?

● 6. *Generalizing.* Ask: What does this map show? Does it show where things are? How?

Lesson 8 (pages 152–153)

This lesson should be used before Lesson 3 pages 120–121, in the chapter entitled Cotton.

OBJECTIVES

Infer how to find distance on a simple grid. *Analyze* how to move from one place to another on a simple grid. *Compare* a grid with a gridlike map. *Recall* the directions of the compass. *Infer* directions on a map from looking at a compass rose. *Observe* ways of measuring distances. *Synthesize* information to begin a map of their own community.

LESSON UNDERSTANDING Maps show direction and distance.

CONCEPTS environment, space

MATERIALS NEEDED magnetic compasses; a yardstick

DEVELOPING THE LESSON

● 1. *Inferring.* Have children look at the grid on page 152. Ask them to identify the objects in the squares. Ask: How far is the fish from the boat? Ask several questions similar to this one, having children count numbers of squares horizontally and vertically, but not diagonally.

● 2. *Analyzing.* Call children's attention to the row of numbers at the left on the grid. Have the children read aloud the numbers. Then do the same for the letters along the top of the grid. Explain that the fish is in square A1. Make sure children know how to match the letter and numerals to identify each square. Then ask: What square is the butterfly in? How would the butterfly go to meet the fish in square A1? How far would the butterfly have to go? (Have the children count the squares horizontally and vertically.)

● 3. *Comparing.* Have children look at the map on page 153. Ask: How is this like the grid on page 152? How is it different?

● 4. *Recalling.* Review with children the directions north, south, east, and west. Pass out magnetic compasses to small groups of children, and explain that the needle points to the north (signified N). Have children take turns telling one another to walk in one of the directions of the compass.

● 5. *Inferring.* Have children look again at the map on page 153. Ask: Do you see the directions of the compass on



8



this map? Where are they? Which way is north on the map? Have children trace the proper direction with their fingers. Repeat this procedure for each of the other directions.

● 6. *Synthesizing*. Have children point out and read the words for different objects on the map. Ask questions such as these: If you visited Dale's house and you wanted to go from there to the city hall, which direction would you walk? How far would you have to walk? Have students count blocks, as they counted squares on the grid on page 152. Also ask questions that require students to travel in one direction and then another.

● 7. *Recalling*. Ask: When you have taken a trip with your family, have you heard people say, "We have gone so many miles"? Are miles a way of measuring how far you go? How else can you measure how far things are from one another? Show the class a yardstick, and refer briefly to inches, feet, and yards as ways of measuring short distances. (You may wish to substitute "kilometers" for *miles* and metric equivalents for other measurements.)

Lesson 9 (pages 154–155)

This lesson correlates with Lesson 3, pages 120–121, in the chapter entitled Cotton.

OBJECTIVES

Infer that a photograph shows a city. *Infer* the reasons for symbols on a map. *Synthesize* information obtained in previous lessons to find direction and distance.

LESSON UNDERSTANDING Maps show direction and distance.

CONCEPTS environment, space

DEVELOPING THE LESSON

1. *Inferring.* Have students look at the photograph on page 154. Ask: What do you see? What kind of community is this? How can you tell? Call children's attention to the streets, the river, and the buildings.
- 2. *Inferring.* Ask children to look at the map on page 155. Ask: What does this show? How is it like the photograph of the city on page 154? How is it different? Have children point out colored areas and read the words by each area. Ask: Why did the mapmaker use different colors? What did he or she want to show? How would this map help you if you wanted to find the library? the railroad station?
- 3. *Synthesizing.* Now have children find direction and distance by asking questions such as these: If you were at the hospital and you wanted to go to the Empire State building, how far would you have to go? (Ask children to count city blocks.) What directions would you travel? (They might either go west and then north, or north and then west.)



9



Lesson 10 (pages 156–157)

This lesson may be used for review and extension of map skills covered in the book.

OBJECTIVES

Analyze why maps cannot contain many words. *Infer* the meaning of symbols on a map. *Synthesize* information to understand that maps often have legends, which explain particular symbols.

LESSON UNDERSTANDING Maps often have legends, which explain particular symbols.

CONCEPTS environment, space

DEVELOPING THE LESSON

● 1. *Analyzing.* Have children look at the top picture on page 156. Ask: What do you see? Have children identify as many features as possible.

Then direct their attention to the map at the bottom of the page. Ask children to find the river. Have them notice the freeway at the right. Ask children to point out other features on the map. Then ask: If the mapmaker wrote the words for things on this map, would you be able to tell better where they are? Why might the mapmaker have trouble doing this? Could he or she fit words on this map? If the mapmaker did, would the words be hard to read? Why do you think so?

● 2. *Inferring.* Now have children look at the map on page 157. Call attention to the map legend. Point out the square showing the church. Ask children to read the word *church*. Then ask: What color do you see by the word? Is this color a symbol? Why? Then say: We can find the church on this map by finding this color. Ask children to point to the church. For each of the squares, ask questions such as these: What color is the symbol for the hotel?

● 3. *Synthesizing.* Write the word *legend* on the chalkboard. Ask children to pronounce the word after you. Ask: Does anyone know what this word means? Say: A legend is a story. On this map, what told you what each color means? Why might mapmakers call this a legend? What story did this legend tell you? How did it help you to find things on the map?

You may mention that legends are sometimes called *keys*. Ask: What does a key do? What does a map key do?



10



	Church		Swimming Pool		Bridge
	Hotel		Railroad		Campsite
	House		Road		Dock
	School		River, Brook		
	Store		Trees and Grass		

Photograph Acknowledgments

Addison-Wesley Publishing Company*: 66 left, 68 bottom left, 84, 86 top left, 89 top, 96, 109 top right
 Annan Photo Features: 45
 Ray Atkeson from Design Photographers International: 37 bottom right
 Dave Bartruff*: 65
 Marshall Berman*: 47 bottom right, 59 top right, 99 both, 131 right, 150 top
 Marc and Evelyn Bernheim from Woodfin Camp and Associates: 92, 93 both, 103, 104 right, 105 top, 107 right, 108 bottom left
 Elihu Blotnick from BBM Associates: 71 top right, 81 top left
 Elihu Blotnick from BBM Associates*: 10 both, 11 bottom, 13 both, 18 bottom, 19 bottom, 20 bottom, 21 right, 22 both, 23 both, 24 both, 26 both, 27 bottom, 29 bottom, 30 bottom right, 31 top left and bottom left, 35 left, 36 all, 39 bottom, 47 bottom left, 48 top and bottom left, 49 all, 50 both, 51 both, 52 bottom, 55 both, 56 both, 57 all, 59 bottom right, 63 top, 73 bottom, 74 left, 75 top, 78 right, 80 top and bottom right, 81 top right, 100 bottom, 101 all, 105 bottom, 108 bottom right, 109 bottom left, 112 top right, 113 top left and top right, 114 bottom right, 115 right, 118 top right, bottom left and bottom right, 119 all, 120 all, 121 both, 122, 124 all, 125 all, 127 top left, bottom left and bottom right, 128 top, 129 both, 130 both, 132 both, 133 both, 136 top left and bottom right, 137 bottom left and bottom right, 144 both
 Van Bucher from Photo Researchers*: 19 top, 25 top, 34 left, 46 top left, 52 top left and top right, 54 top, 59 bottom left, 64 top left, 81 bottom right, 113 bottom left, 116 top left, top right and bottom left, 117 all, 118 top left, 136 top right and bottom left
 B. Campoli from The Sea Library: 15 left
 Richard Crone*: 18 top, 20 top, 25 bottom, 29 top left and top right, 34 right, 46 bottom, 87 all, 100 top, 116 bottom right, 134 top
 E. I. du Pont de Nemours & Company, courtesy of: 126 all
 ENTHEOS: 113 bottom right
 Environmental Science Services Administration, Coast and Geodetic Survey: 154
 Farmland Industries, courtesy of: 54 bottom
 Douglas Faulkner: 14, 30 top
 Jack Fields: 27 top, 31 bottom right
 Food and Agriculture Organization of the United Nations, photos by G. Tortoli: 38 top left and top right
 John Freitag: 112 left
 George B. Fry III*: 123 bottom right
 Jehangir Gazdar from Woodfin Camp and Associates: 135 left
 Esther A. Gerling from Freelance Photographers Guild: 106 bottom
 Georg Gerster from Rapho/Photo Researchers: 123 top right, 137 top left
 Bob Glaze from Artstreet: 11 top, 30 bottom left
 George Hall: 128 bottom

George Hall*: 86 top right, bottom left and bottom right, 88, 95 all, 97 top, 98 all, 102, 106 top, 108 top left, 109 top left, 134 bottom
 Dennis Hallinan from Freelance Photographers Guild: 16
 Rod Hanna: 53 top
 John Hanson*: 35 right, 58 bottom
 Erich Hartmann from Magnum: 47 top left
 Grant Heilman: 37 top left and top right, 38 bottom, 40 both, 41 bottom, 58 top
 Leo Hetzel: 66 right, 114 top right
 Leo Hetzel*: 67 bottom right, 70 all, 71 left and bottom right, 73 top left, 74 right, 75 bottom, 77 both, 79 both, 80 bottom left, 81 bottom left, 137 top right
 Honolulu Academy of Arts, courtesy of: 28 top, a detail from "Sudden Shower at Ohashi" by Hiroshige, Collection of James A. Michener
 International Harvester, courtesy of: 41 top, 42 both
 D. Jacobson from Pictorial Parade: 131 left
 King Ranch photo by John A. Cypher, Jr., courtesy of: 64 bottom
 John Launois from Black Star: 44
 Marshall Lockman from Black Star: 91 bottom right
 Alexander Low from Woodfin Camp and Associates: 63 bottom
 Loren McIntyre from Woodfin Camp and Associates: 62 bottom, 67 bottom left
 W. Mahoney from Shostal Associates: 53 bottom right
 Ray Manley from Shostal Associates: 156 top
 Pamela Johnson Meyer*: 53 bottom left, 64 top right, 67 top right, 68 top and bottom right, 72, 73 top right, 76 both, 78 top left and bottom left, 109 bottom right
 David Moore from Black Star: 17 top right
 Dan Morrill: 69 bottom
 Dan Morrill*: 12 both, 17 bottom, 28 bottom, 47 top right, 145 bottom left and bottom right
 H. Morton from Shostal Associates: 46 top right
 NASA: 114 left, 140 all, 141, 142
 Bil Plummer*: 143
 Carl Purcell: 112 bottom right
 reflejo: 21 left, 31 top right, 91 left
 reflejo from Susan Griggs Agency: 17 top left, 91 top right, 115 left, 123 left
 Carl Roessler: 15 right
 Edward S. Ross: 85
 Charles E. Rotkin from Photography for Industry: 43 both, 62 top
 Bob and Ira Spring: 39 top, 48 bottom right
 Dan Sullivan*: 94, 97 bottom, 107 left, 151 top
 Kryn Taconis from Magnum: 104 left
 Bud Thon: 127 top right
 Tom Tracy: 90
 United States Department of Agriculture: 37 bottom left, 59 top left, 108 top right
 United States Department of the Interior, National Park Service: 135 right
 Alvis Uptis from Shostal Associates: 89 bottom
 Wyoming Travel Commission, courtesy of: 67 top left, 69 top

*Photographs provided expressly for the publisher

Teacher Bibliography

Fishing Communities

Cousteau, Jacques Y., and Dumas, Frederic. *The Silent World*. New York: Harper & Row, 1953.

Cousteau portrays the magic of the ocean world. All about diving with the aqualung, about fish, coral, and sunken ships.

Holm, Don. *Pacific North: Adventures in Sport Fishing*. Caldwell, IN: Caxton, 1969.

A look at the sport of fishing. A great deal of material about all kinds of fishing. Fine photographs and charts.

Idyll, C. P. *The Sea Against Hunger: Harvesting the Oceans to Feed a Hungry World*. New York: Thomas Y. Crowell, 1970.

A very thorough, and perhaps chilling, study of the possibilities of harvesting the oceans for food. The author may not be aware that sea farming can harm the oceans as much as other things have harmed the land.

Grain-Farming Communities

Hyams, Edward. *Plants in the Service of Man: Ten Thousand Years of Domestication*. Philadelphia: J. B. Lippincott, 1972.

A good source for information on grains, cottons, and other plants.

Sears, Paul. *Lands Beyond the Forest*. Englewood Cliffs, NJ: Prentice-Hall, 1969.

An ecologist discusses the importance of open spaces, or grasslands, to the existence of civilization.

Cattle-Raising Communities

Atherton, Lewis. *The Cattle Kings*. Bloomington, IN: Indiana University Press, 1961.

An authoritative history of cattle ranching on the American frontier.

Dale, Edward Everett. *The Range Cattle Industry: Ranching on the Great Plains from 1865 to 1925*. Norman, OK: University of Oklahoma Press, 1960.

A history of the cattle industry from its rise, to its peak and its decline.

Diggins, Ronald V., and Bundy, Clarence C. *Dairy Production*. Englewood Cliffs, NJ: Prentice-Hall, 1969.

A practical volume with numerous pictures and charts.

Snapp, Roscoe R., and Neumann, A. L. *Beef Cattle*. 5th ed. New York: John Wiley, 1960. A technical book on the breeding and feeding of cattle. Maps, statistics, and charts.

Seidman, Laurence Ivan. *Once in the Saddle: The Cowboy's Frontier, 1866-1896*. New York: Alfred A. Knopf, 1973.

The author uses original sources, such as letters, diaries, songs, and illustrations of the period, to tell the story of American cowboys. A book for the junior library, but fine for teachers as well.

Lumbering Communities

Allen, Shirley W., and Sharpe, Grant William. *Introduction to American Forestry*. New York: McGraw-Hill, 1960.

An inclusive text on the management of forests.

Cliff, Edward P. *Timber: The Renewable Material—Perspective for Decision*. Washington, D.C.: U.S. Government Printing Office, 1973.

Prepared for the National Commission on Materials Policy, the book analyzes lumber and timber in American forests and makes recommendations about cutting. Charts and graphs.

Engbeck, Joseph H., Jr. *The Enduring Giants*. Berkeley, CA: University of California Extension, 1973.

An unusual book, divided into three parts: "The Natural History of Giant Sequoia"; "Giant Sequoia and Human History"; and "The Movement to Preserve the Calaveras Groves." Beautiful photographs.

Frome, Michael. *The Forest Service*. New York: Praeger, 1971.

An interesting, if sober, discussion of the methods and practices of the Forest Service, and its relationship to Congress and to land-use agencies. Includes analyses of conflicts between business and environmental interests.

Cloth-Manufacturing Communities

Bradshaw, Angela. *World Costumes*. rev. ed. New York: Macmillan, 1965.

Mainly drawings, accompanied by short explanatory text, showing indigenous dress in all parts of the world.

Farb, Peter. *Living Earth*. rev. ed. New York: Harper & Row, 1969.

An exploration of varieties of life in three types of soil found on the earth: forest, grassland, and desert. All these minute creatures (even viruses) contribute to the life of everything else.

Flugel, J. C. *The Psychology of Clothes*. IN: Indiana University Press, 1969.

A rather old-fashioned book, but one that is amusing and interesting. Dr. Flugel theorizes that clothing serves three purposes: as decoration, as a reflection of modesty, and as protection, in that order.

Graham, Frank. *Since Silent Spring*. Boston: Houghton Mifflin, 1970.

Mr. Graham begins with an account of why Rachel Carson wrote *Silent Spring*, and gives information on some of the difficulties and criticisms she encountered. He then tells about the growing evidence that confirms her position and explains what people can do to continue her work.

Murphy, Robert. *Wild Sanctuaries: Our National Wildlife Refuges—A Heritage Restored*. New York: E. P. Dutton, 1968.

An account of wildlife refuges from Hawaii and Alaska, across the continental U.S. with some extraordinary photographs (and some ordinary ones). A bit on longhorn cattle and buffalo.

Swan, Lester A. *Beneficial Insects*. New York: Harper & Row, 1964.

A study of nature's alternatives to chemical insecticides. Swan argues that predatory insects are more effective against destructive insects and fungi than are chemicals.

Student Bibliography

Fishing Communities

Earle, Olive L. *Strange Fishes of the Sea*. Illustrated by the author. New York: William Morrow, 1968. (3-7)

Simple text with interesting detail and pictures that exemplify the variety of sea life.

Englebert, Victor. *Camera on Ghana: The World of a Young Fisherman*. New York: Harcourt Brace Jovanovich, 1971. (3 up)

A young Ewe, the son of a farmer, wants to

become a fisher like most of the men of the village. In addition to fishing, one sees many aspects of the village life.

Floethe, Louise Lee. *Fishing Around the World*. Illustrated by Richard Floethe. New York: Charles Scribner's Sons, 1972. (1-3)
Bright pictures and easy, pleasant exposition of fishing and the importance of seafood to the world's food supply.

Flora, James. *Fishing With Dad*. Illustrated by the author. New York: Harcourt Brace Jovanovich, 1967. (1-4)
Dad permits his son to go fishing on the father's commercial fishing boat.

Hawes, Judy. *Shrimps*. Illustrated by Joseph Low. New York: Thomas Y. Crowell, 1966. (K-3)
The life cycle of the shrimp, how it is constructed, how it moves—and where and how scientists found out about it all.

Hurd, Edith Thacher. *What Whale? Where?* Illustrated by Clement Hurd. New York: Harper & Row, 1966. (K-3)
Two boys out fishing meet a whale who eats their lunch, swallows their anchor, and drags them far out to sea. Ultimately the whale takes them home again.

Ipcar, Dahlov. *The Biggest Fish in the Sea*. Illustrated by the author. New York: Viking, 1972. (K-3)
A modern Jonah, Tino is swallowed up along with his family and fellow townspeople by the biggest fish in the sea. When the fish extracts a promise from Tino and all the others only to catch fish to eat, he lets them all go.

Kumin, Maxine W. *The Beach Before Breakfast*. Illustrated by Leonard Weisgard. New York: G. P. Putnam's Sons, 1964. (2-4)
Adult-child companionship on a private fishing expedition. As "you" (the reader) and an adult friend wander along the beach finding all sorts of shellfish, casual conversation furnishes information.

Selsam, Millicent. *Plenty of Fish*. Illustrated by Erik Blegvad. New York: Harper & Row, 1960. (K-3)
A boy discovers elementary facts about fish: how they breathe, what plants and snails do for a fish bowl, and how to care for and feed fish.

Simon, Seymour. *From Shore to Ocean Floor: How Life Survives in the Sea*. Illustrated by Harris Petie. New York: Franklin Watts, 1973. (4-5)
The theme is survival in a world where each thing swallows another living thing. The text is not easy, but it might be useful for a teacher to use with the class.

Grain-Farming Communities

Hodges, Margaret. *The Wave*. Illustrated by Blair Lent. Boston: Houghton Mifflin, 1964. (K-3)
A wise old man lives high on the side of a mountain where he can see the sea. To warn the villagers below of an imminent tidal wave, he burns his rice fields. The villagers rush up the mountain to put out the fire and are saved. The story, a fine one, emphasizes the importance of rice.

Kahl, Virginia. *The Duchess Bakes a Cake*. Illustrated by the author. New York: Charles Scribner's Sons, 1955. (K-3)
The Duchess rides heavenward on the dough of the cake she had tried to bake. Too much yeast. Her solution is to eat her way back to earth, and she is helped in this by other members of the court. In rhyme.

_____. *The Perfect Pancake*. Illustrated by the author. New York: Charles Scribner's Sons, 1960. (1-5)
Everyone agrees that the Duchess bakes a perfect pancake, but she allows only one to a customer. A hungry beggar outwits her by disagreeing with the common belief and getting her to bake him pancake after pancake in a perfect frenzy to achieve a perfect one. In rhyme.

Labell, Winifred and Cecil. *Green Is for Growing*. Chicago: Rand McNally, 1964. (1-3)
In rhythmic prose, the text explains that humans cannot live without green growing plants. The discussion begins with algae, ends with trees, and covers grasses in between.

Rinkoff, Barbara. *Guess What Grasses Do*. Illustrated by Beatrice Darwin. New York: Lothrop, Lee & Shephard, 1971. (K-3)
Short, simple sentences explain how Native Americans and early settlers used grasses, animals' need for grasses, and modern uses

of grass for food and fun. Silk screen drawings in gold, black, and grey-blue.

Sendak, Maurice. *In the Night Kitchen*. Illustrated by the author. New York: Harper & Row, 1970. (K-4)
A Caldecott Award book detailing the adventures of Micky, who dreams that he falls out of his clothes into a big bowl of dough.

Tooze, Ruth. *Our Rice Village in Cambodia*. Illustrated by Ezra Jack Keats. New York: Viking, 1963. (2-5)
A simple story of life in a Cambodian village: how Father builds the house of bamboo, how the animals live under the house (which is on stilts), how rice is planted and harvested, and what people do for fun.

Cattle-Raising Communities

Aliki, ed. Branley, Franklyn M., and Gans, Roma. *Green Grass and White Milk*. Illustrated by the author. New York: Thomas Y. Crowell, 1974. (PS-3)
The process of how green grass is turned into white milk on its way through a cow and a commercial dairy. Quite detailed and technical, but the author has provided fine pictures and charts to clarify her already simple text.

Bowman, James Cloyd. *Pecos Bill*. Illustrated by Laura Bannon. Chicago: Albert Whitman, 1937. (2-7)
Nineteen very good tales about Pecos Bill collected by Dr. Bowman, a specialist in American folklore. Good for reading aloud.

Duvoisin, Roger. *Jasmine*. Illustrated by the author. New York: Alfred A. Knopf, 1973. (K-3)
Jasmine is not the usual cow. She takes her milk-producing function lightly and goes about in a frivolous hat. More about character, perhaps, than about cows, but not without charm.

Epstein, Sam and Beryl. *The First Book of Switzerland*. New York: Franklin Watts, 1964. (4-6)
A lively book with good photographs. There is a chapter on the *inalpe*, the day in spring when cattle are driven to the high meadows. There is also material on making cheese and chocolate, among other things.

Felton, Harold W. *Nat Love: Negro Cowboy*. Illustrated by David Hodges. New York: Dodd, Mead, 1969. (3-7)

Much of the material for this was taken from Nat Love's autobiography, and the drawings of him resemble his photograph. Love was an expert in his line.

Fletcher, Sydney E. *The Big Book of Cowboys*. rev. ed. Illustrated by the author. New York: Grosset & Dunlap, 1964. (4-6)

Big bold illustrations by the author and an abbreviated text. A good book to have out on a table in the classroom.

Floethe, Louise. *The Cowboy on the Ranch*. Illustrated by Richard Floethe. New York: Charles Scribner's Sons, 1959. (K-4)

These cowboys do all the usual things, but they do it in bright, happy pictures and an easygoing text.

_____. *The Farmer and His Cows*. Illustrated by Richard Floethe. New York: Charles Scribner's Sons, 1957. (K-4)

On one page, we learn how a dairy farmer used to farm and care for cows, and on the next page, how the farmer does the same kinds of things today. Bright, happy pictures and simple text.

_____. *Farming Around the World*. Illustrated by Richard Floethe. New York: Charles Scribner's Sons, 1970. (K-3)

The story covers many kinds of farms in many parts of the world. Of particular interest are rice cultivation in Japan, Thailand, and Indonesia; wheat in Russia; cows in Switzerland; and cattle in Argentina.

Gidal, Sonia and Tim. *My Village in Switzerland*. New York: Pantheon Books, 1961. (4-6)

Fine pictures and a bit about cows, milk, and cheese.

Hoff, Syd. *Thunderhoof*. Illustrated by the author. New York: Harper & Row, 1971. (PS-3)

The last wild horse, Thunderhoof, is conquered first by drought and then by love.

Jewell, Nancy. *Calf, Goodnight*. Pictures by Leonard Weisgard. New York: Harper & Row, 1973. (PS-3)

Mama Cow successfully herds Calf through the early night and into the warm barn where Calf falls asleep in the hay.

Malcomson, Anne. *Yankee Doodle's Cousins*. Illustrated by Robert McCloskey. Boston: Houghton Mifflin, 1941. (4-8)

Pecos Bill, Paul Bunyan, and many others, all placed in their regional settings. Good for reading aloud.

Stoutenburg, Adrien. *American Tall Tales*. Illustrated by Richard M. Powers. New York: Viking, 1966. (4-6)

Well-told stories about Pecos Bill, Paul Bunyan, Stormalong, and five other American folk heroes.

Lumbering Communities

Adrian, Mary. *A Day and a Night in a Forest*. Illustrated by Genevieve Vaughan-Jackson. New York: Hastings House, 1967. (2-4)

The interdependence of forest creatures is the subject of this fine book. Black and white drawings delineate the creatures accurately.

Atwood, Ann. *The Kingdom of the Forest*. Photographs by the author. New York: Charles Scribner's Sons, 1972. (3 up)

Photographs and text beautifully delineate the ecology of the forest. A good book for teachers and students.

Baylor, Byrd. *They Put on Masks*. Illustrated by Jerry Ingram. New York: Charles Scribner's Sons, 1974. (1-4)

Ms. Baylor gives the meanings and magic rituals associated with different Native American masks. Readers are asked what kind of mask they would make and what kind of magic they would want it to perform.

Blough, Glenn O. *Christmas Trees and How They Grow*. Illustrated by Jeanne Bendick. New York: McGraw-Hill, 1961. (1-4)

In the snowy woods, Father, Billy, and Barbara find a tree to cut for Christmas. As the text continues, it gives information on evergreens, seeds, tree farms, products from trees, and the lighting of the Christmas tree at the Capitol in Washington, D.C.

Buehr, Walter. *Timber: Farming Our Forests*. Illustrated by the author. New York: William Morrow, 1960. (4-6)

Descriptions of early logging, details on a logger's life, a bit on Paul Bunyan, and a description of a forest fire. A great deal of information.

Buff, Mary and Conrad. *Big Tree*. New York: Viking, 1946. (5-7)

The imagined life of a Sequoia named Wawona from its beginning as a seedling some 5,000 years ago to the present. Wawona has withstood many dangers, including humans, who are presented as one of the greatest threats to a big tree.

Graves, Charles P. *John Muir*. Illustrated by Robert Levering. New York: Thomas Y. Crowell, 1973. (K-4)

The story of John Muir—why he came with his family from Scotland, founded the Sierra Club, and became chief spokesperson for the preservation of the wilderness.

Linneaweaver, Charles and Marion. *The First Book of Canada*. Pictures by W. R. Lohse. New York: Franklin Watts, 1955. (4-6)

A brief history of Canada, including material on lumbering and fishing.

Rich, Louise Dickinson. *The First Book of Lumbering*. Illustrated by Victor Mays. New York: Franklin Watts, 1967. (4-6)

A discussion of lumbering from American colonial days to the present.

Rinkoff, Barbara. *Guess What Trees Do*. Illustrated by Beatrice Darwin. New York: Lothrop, Lee and Shephard, 1974. (K-3)

An exhaustive list of the benefits of trees: totem poles to chocolate, windbreaks to the production of oxygen (an acre of trees will keep 15 people breathing). Lovely silk screen illustrations and simple, well-composed text.

Selsam, Millicent. *Birth of a Forest*. Pictures by Barbara Wolff and photographs. New York: Harper & Row, 1964. (3-6)

A description of the processes involved in beginning and developing a forest—swamps fill, meadows and grasses come, and the trees encroach.

_____. *See Through the Forest*. Illustrated by Winifred Lubell. New York: Harper & Row, 1956. (3-6)

An accurate description of the life at different "layers" of a forest and what each contributes to the whole.

_____. *Play With Trees*. Illustrated by Fred F. Scherer. New York: William Morrow, 1950. (3-7)

More scientific than lyrical, this book offers

instruction on how to grow trees from seeds, the components of trees, and the differences in trees. Useful for projects.

Sharoff, Victor. *The Heart of the Wood*. Illustrated by Wallace Tripp. New York: Coward, McCann & Geoghegan, 1971. (1-4)
A story about a young boy learning to carve wood, about faith in one's materials, and truth to one's beliefs.

Cloth-Manufacturing Communities

Ambrus, Victor G. *The Three Poor Tailors*. New York: Harcourt Brace Jovanovich, 1965. (K-3)
These tailors make coats for rich people in a town where tailors have never been.

Ayer, Jacqueline. *Little Silk*. Harcourt Brace Jovanovich, 1970. (K-3)
Little Silk is a doll made of silk long ago in Hong Kong. She is faded and bored until she is taken to a little girl in a village.

Belting, Natalia. *The Land of the Taffeta Dawn*. Illustrated by Joseph Low. New York: E. P. Dutton, 1973. (PS-2)
Viking merchants explore the rich markets of the Tang Dynasty in China (eighth to tenth centuries) and return home with luxurious silks, brocades, and tales of lavish life.

Brown, Joe David, and the Editors of *Life*. *India*. New York: Time, 1964.
Useful for pictures of India and Indians. Some information and pictures on weaving, dyeing, and printing cloth.

De Paola, Tomie. *Charlie Needs a Cloak*. Englewood Cliffs, NJ: Prentice-Hall, 1974. (PS-2)
A delightfully illustrated, simply told tale of Charlie, a shepherd, who gets a cloak by shearing, washing, carding, spinning, weaving, cutting out, pinning, and sewing. Perhaps children won't notice that although he neglects to dye the wool, his new cloak is red.

Gidal, Sonia and Tim. *My Village in Norway*. New York: Pantheon, 1958. (4-6)
Good Gidal pictures and quite a bit of information on fishing and processing fish for export. Also on sheep, shearing, and wool.

Hirsh, Marilyn. *The Pink Suit*. New York: Crown, 1970. (PS-2)
Eugene is a real hero: he wears the pink suit his mother bought for a bargain even though he hates it. But Eugene is clever. He seeks an environment that matches the suit (sticking close to a lady in pink, etc.) and in the end is able to trade off with a boy who wants a suit that is like no other.

Ipcar, Dahlov. *The Calico Jungle*. New York: Alfred A. Knopf, 1965. (PS-2)
A simple description of the flora and fauna that make up a wonderful patchwork quilt—made out of bright pieces of calico.

Rogers, Matilda. *The First Book of Cotton*. Pictures by Mimi Korach. New York: Franklin Watts, 1954. (4-6)
How cotton is grown, and where; how it is picked and processed; and what it can be made into. Also inventions connected with cotton and pictures of cotton growing in different places and times.

Wormser, Sophie. *About Silkworms and Silk*. Illustrated by Harry Garo. Chicago: Melmont, 1961. (2-5)
A text on raising silk worms. It takes the form of conversations in a classroom of children who are experimenting with just that. Each step is clearly described, and the illustrations are informative.

Resource Center

Adler, Irving and Ruth. *The Calendar*. New York: John Day, 1967. (3-5)
An explanation of what the calendar is and how it is used.

Branley, Franklyn M. *A Book of Planets for You*. rev. ed. Illustrated by Leonard Kessler. New York: Thomas Y. Crowell, 1966. (2-4)
An excellent book on the nine planets that circle the sun—their sizes, characteristics, revolution, and rotation.

_____. *The Sun: Our Nearest Star*. Illustrated by Helen Borten. New York: Thomas Y. Crowell, 1961. (K-2)
A good book that gives basic information about the sun.

Carlisle, Norman and Madelyn. *The True Book of Maps*. Illustrated by Robert O'Malley. Chicago: Children's Press, 1969. (1-3)
A description of the way maps indicate distance and direction and an explanation of the symbols on maps.

Evans, Eva Knox. *Why We Live Where We Live*. Illustrated by Ursula Koering. Boston: Little, Brown, 1953. (4-7)
Although too difficult for the children to read by themselves, the text provides excellent material on why some people live on farms, some in cities, and so on.

The editors and cartographers of Hammond Incorporated. *The First Book Atlas*. rev. ed. New York: Franklin Watts, 1968. (3-5)
Clear maps and simple text. Includes maps for large cities and products of areas.

Polgreen, John and Cathleen. *Sunlight and Shadows*. New York: Doubleday, 1967. (1-3)
Good information on change of seasons, change from day to night, and why shadows change.

Ravielli, Anthony. *The World is Round*. Illustrated by the author. New York: Viking, 1963. (2-5)
A history of people's changing ideas about the shape of the earth.

Item 1

Things People Learn

to swim	to fish
to count	to ride a bicycle
to play ball	to wash dishes
to talk	to play tag
to set the table	to take turns
to add numbers	to read maps
to fly an airplane	to skate
to read	to draw pictures
to follow rules	to count money
to walk	to play the piano
to sing	to use a tool
to count	to grow plants
to run a machine	to ride a horse

Birthdays in Our Class

January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

Matching Exercise

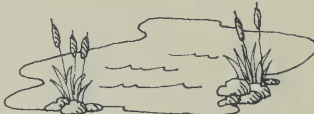
natural resources



community



tools



special jobs



customs



transportation



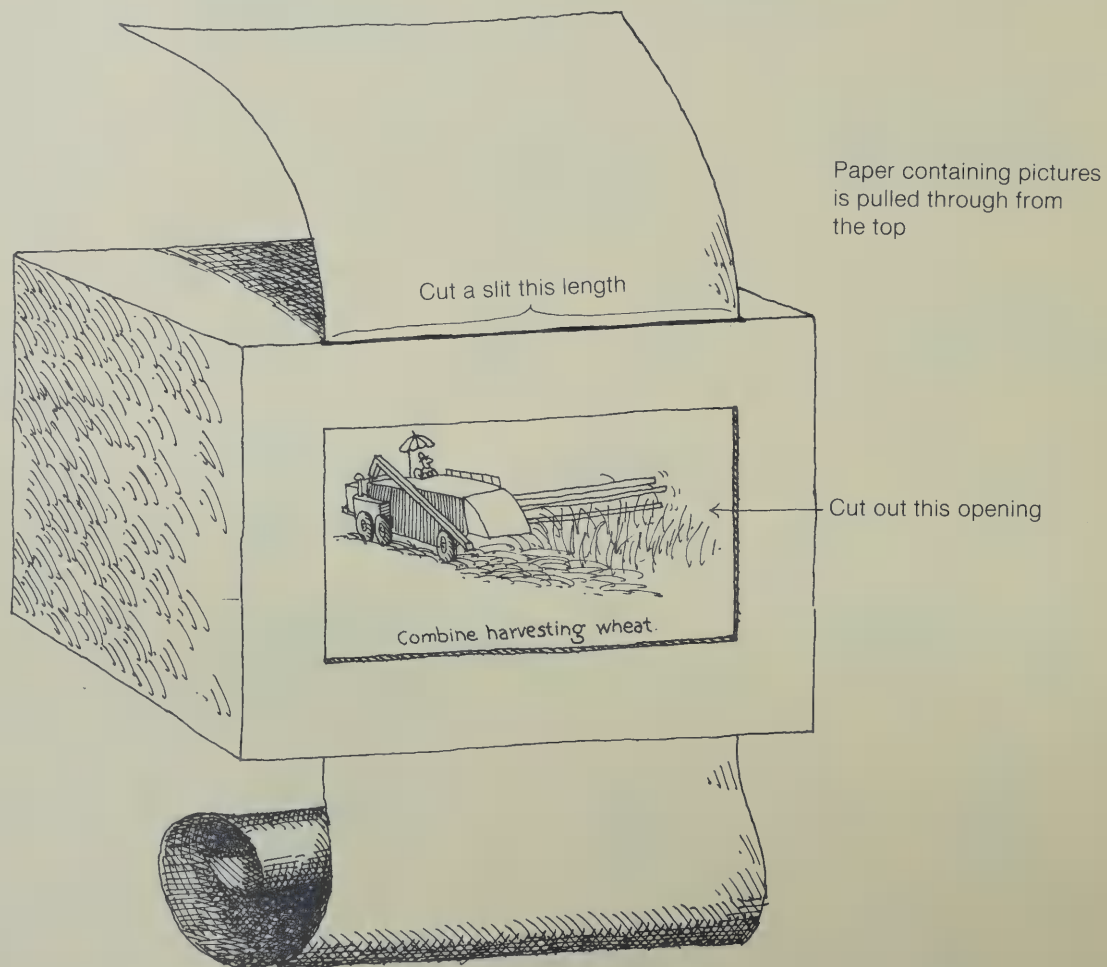
needs



Item 4

Ways of Life

	Grain-Farming Communities in Thailand	Grain-Farming Communities in the United States	Our Community
Food			
Fun			
Community life			
Family life			
Homes			
Clothing			

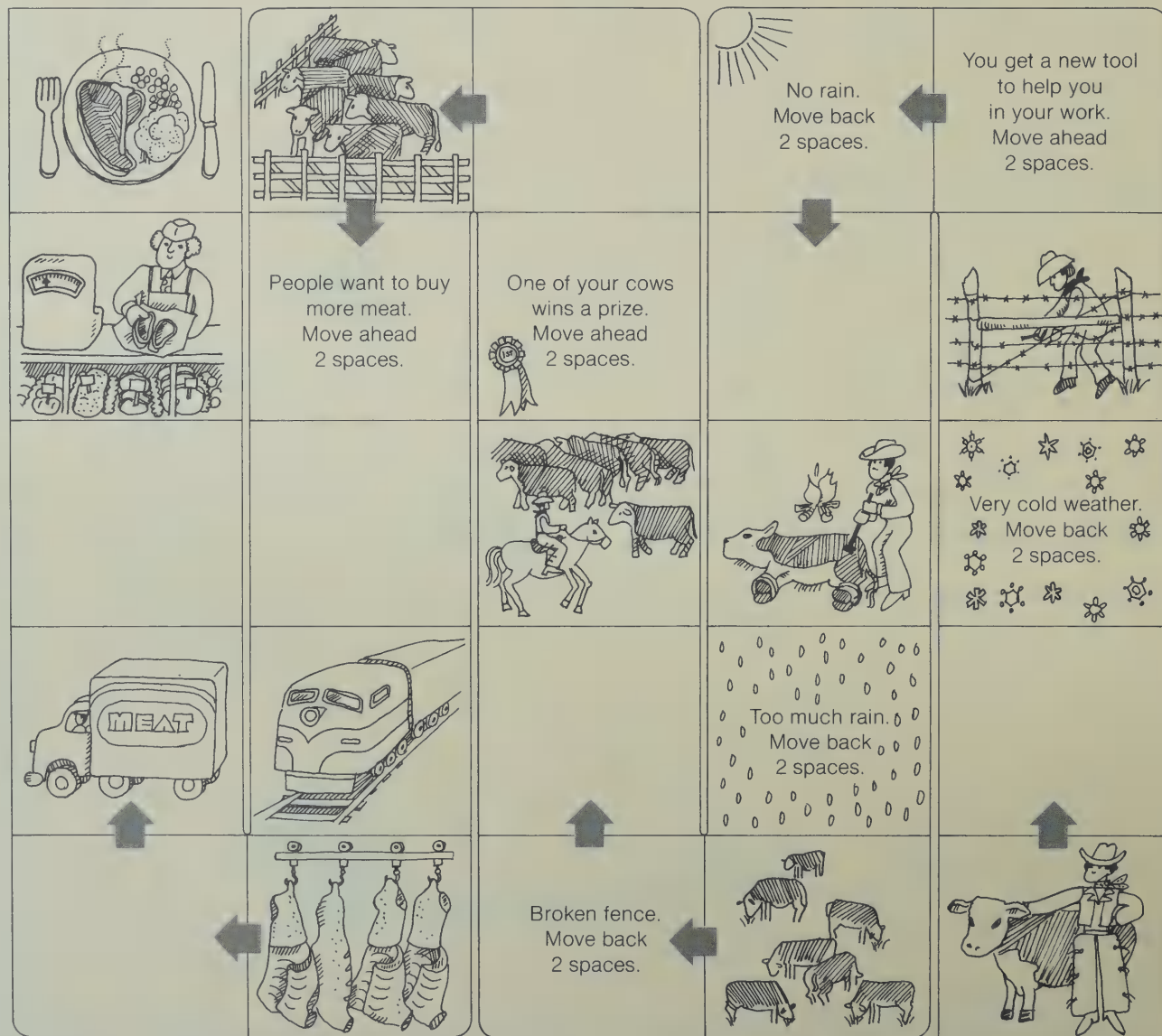


English and Spanish Words

English	Spanish	Meaning
lasso	laso	
lariat	reata	
rodeo	rodeo	
cow	vaca	
cowboy	gaucho	
ranch	estancia	
horse	caballo	
hat	sombrero	
school	escuela	

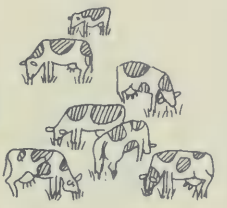
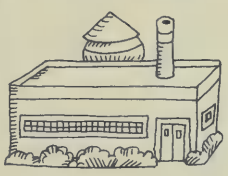
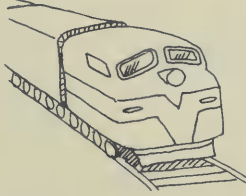
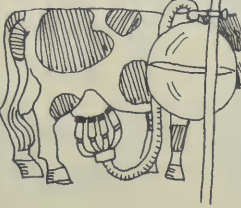
Gameboard for Meat Processing

END



START

Gameboard for Dairy Processing

		 Bad storm. Move back 2 spaces.	People want more milk to drink. Move ahead 2 spaces.	
		Some of your cows are sick. Move back 2 spaces.		
		Grass fire. Move back 2 spaces.	Good weather. Move ahead 2 spaces.	 No rain. Move back 2 spaces.
				
People want to buy more cheese. Move ahead 2 spaces.				

START



tree trunk



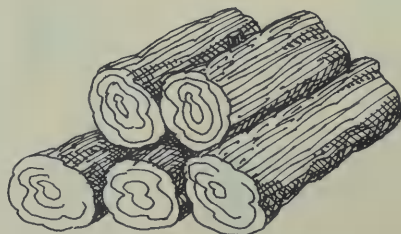
branches



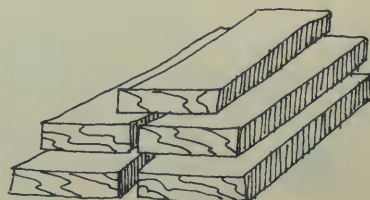
roots



stump



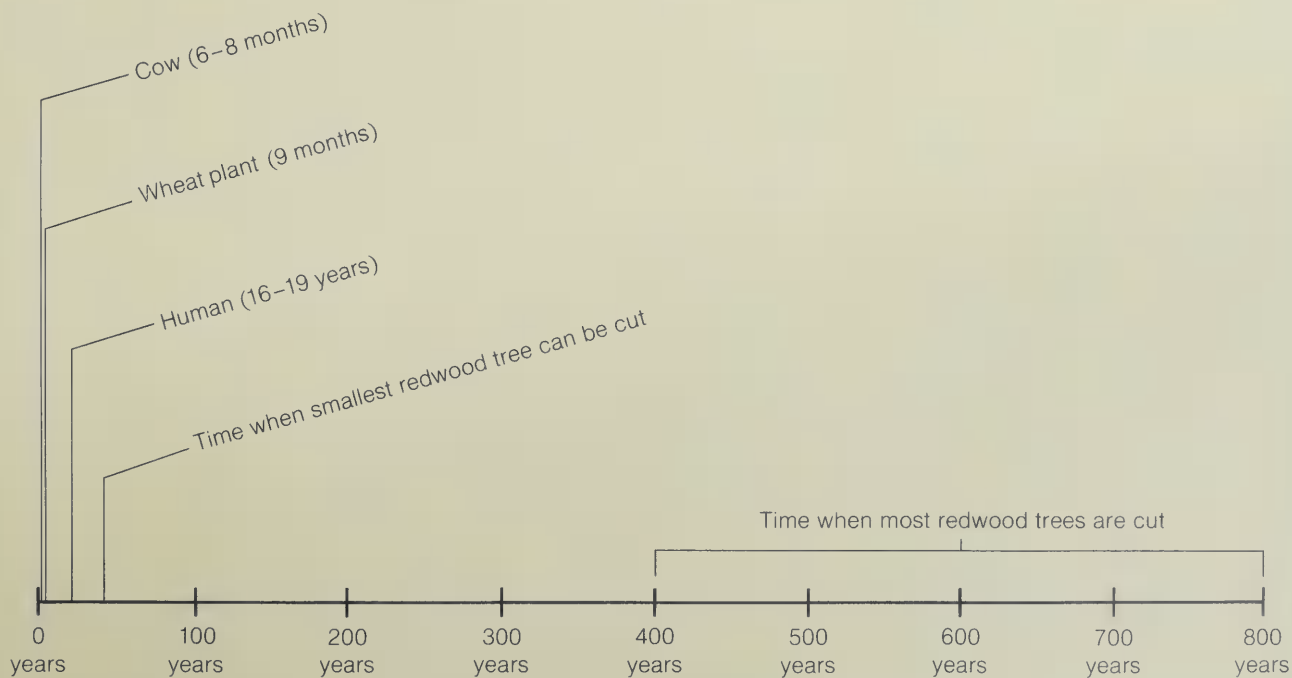
logs



lumber

Item 10

Times When Plants and Animals
Reach Full Growth



Fill in the Words

1. _ _ _ _ is a danger to trees.
2. _ _ _ _ _ trees give round fruits that make good juice.
3. The _ _ _ _ _ are the part of the trees that are under the ground.
4. _ _ _ _ _ are animals that are used to move logs.
5. Wood comes from a _ _ _ _ _.



DATE DUE SLIP

EDUC NO 1 179	NOV 20 RETURN
RETURN NOV - 1 '79	DUE EDUC MAR 29 '85
EDUC DE - 7 '79	MAR 25 RETURN
DEC 3 RETURN	APR 03 '91
DUE EDUC FEB 1 '80	APR 08 1991 RETURN
RETURN JAN 28 '80	EDUC OCT 22 '95
DUE EDUC FEB 28 '80	RETURN OCT 20 '85
EDUC MR 7 '80	
MAR 17 RETURN	
DUE EDUC MAR 23 '84	
MAR 20 RETURN	
DUE EDUC APR 1 '84	
APR 10 RETURN	
DUE EDUC NOV 20 '85	
NOV 15 RETURN	
DUE EDUC NOV 25 '84	

H 95 G87 1976 TCH-ED-
GROSSMAN RUTH H
PEOPLE PLACES PRODUCTS/

39402156 CURR



000007220775

H 95 G87 1976 Tch.ed.
Grossman, Ruth H.
People, places, products /

0307491H CURR

RECOMMENDED FOR USE
IN ALBERTA SCHOOLS



B21949

People: Cultures, Times, Places **An Elementary School Social Studies Program**
Directors: Richard E. Gross, John U. Michaels, and Phillip Bacon
Addison-Wesley Publishing Company